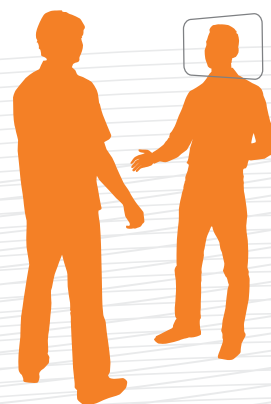


TANDBERG Content Server



CHANGING
THE WAY PEOPLE
COMMUNICATE



ADMINISTRATOR GUIDE

Version S3
December 2007



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ADMINISTRATOR GUIDE

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US7,136,577
US6,590,603
US7,283,588
EP01953201
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Other patents pending

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Operator Safety / Environmental Issues

For your own protection, please read the overleaf safety instructions completely, before operating the equipment and keep this manual for future reference. The information in this summary is intended for operators. Carefully observe all warnings, precautions and instructions both on the apparatus and in the operating instructions.

For your protection please read these safety instructions completely before you connect the equipment to the power source. Carefully observe all warnings, precautions and instructions both on the apparatus and in these operating instructions.

Retain this manual for future reference.

Water and Moisture

- Do not operate the apparatus under or near water—for example near a bathtub, kitchen sink, or laundry tub, in a wet basement, near a swimming pool or in other areas with high humidity.
- Never install jacks for communication cables in wet locations unless the jack is specifically designed for wet locations.
- Do not touch the product with wet hands.

Cleaning

- Unplug the apparatus from communication lines, mains power-outlet or any power source before cleaning or polishing.
- Do not use liquid cleaners or aerosol cleaners.
- Use a lint-free cloth lightly moistened with water for cleaning the exterior of the apparatus.

Ventilation

- Do not block any of the ventilation openings of the apparatus. Never cover the slots and openings with a cloth or other material.
- Never install the apparatus near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not place the product in direct sunlight or close to a surface directly heated by the sun.

Lightning

- Never use this apparatus, or connect/disconnect communication cables or power cables during lightning storms.

Dust

- Do not operate the apparatus in areas with high concentration of dust.

Vibration

- Do not operate the apparatus in areas with vibration or place it on an unstable surface.

Power Connection and Hazardous Voltage

- The product may have hazardous voltage inside. Never attempt to open this product, or any peripherals connected to the product, where this action requires a tool.
- This product should always be powered from an earthed power outlet.
- Never connect attached power supply cord to other products.

In case any parts of the product have visual damage never attempt to connect mains power, or any other power source, before consulting service personnel.

- The plug connecting the power cord to the product/power supply serves as the main disconnect device for this equipment. The power cord must always be easily accessible.
- Route the power cord so as to avoid it being walked on or pinched by items placed upon or against it. Pay particular attention to the plugs, receptacles and the point where the cord exits from the apparatus.
- Do not tug the power cord.
-

- If the provided plug does not fit into your outlet, consult an electrician.
- Never install cables, or any peripherals, without first unplugging the device from it's power source.

Servicing

- Do not attempt to service the apparatus yourself as opening or removing covers may expose you to dangerous voltages or other hazards, and will void the warranty. Refer all servicing to qualified service personnel.
- Unplug the apparatus from its power source and refer servicing to qualified personnel under the following conditions:
 - If the power cord or plug is damaged or frayed.
 - If liquid has been spilled into the apparatus.
 - If objects have fallen into the apparatus.
 - If the apparatus has been exposed to rain or moisture.
 - If the apparatus has been subjected to excessive shock by being dropped.
 - If the cabinet has been damaged.
 - If the apparatus seems to be overheated.
 - If the apparatus emits smoke or abnormal odor.
 - If the apparatus fails to operate in accordance with the operating instructions.

Accessories

- Use only accessories specified by the manufacturer, or sold with the apparatus.

Communication Lines

- Do not use communication equipment to report a gas leak in the vicinity of the leak.

Thank you for buying a product which contributes to a reduction in pollution, and thereby helps save the environment. Our products reduce the need for travel and transport and thereby reduce pollution. Our products have either none or few consumable parts (chemicals, toner, gas, paper). Our products are low energy consuming products.

TANDBERG's Environmental Policy

Environmental stewardship is important to TANDBERG's culture. As a global company with strong corporate values, TANDBERG is committed to following international environmental legislation and designing technologies that help companies, individuals and communities creatively address environmental challenges.

TANDBERG's environmental objectives are to:

- Develop products that reduce energy consumption, CO₂ emissions, and traffic congestion.
- Provide products and services that improve quality of life for our customers.
- Produce products that can be recycled or disposed of safely at the end of product life.
- Comply with all relevant environmental legislation.

European Environmental Directives

As a manufacturer of electrical and electronic equipment TANDBERG is responsible for compliance with the requirements in the European Directives 2002/96/EC (WEEE) and 2002/95/EC (RoHS).

The primary aim of the WEEE Directive and RoHS Directive is to reduce the impact of disposal of electrical and electronic equipment at end-of-life. The WEEE Directive aims to reduce the amount of WEEE sent for disposal to landfill or incineration by requiring producers to arrange for collection and recycling. The RoHS Directive bans the use of certain heavy metals and brominated flame retardants to reduce the environmental impact of WEEE which is landfilled or incinerated.

TANDBERG has implemented necessary process changes to comply with the European RoHS Directive (2002/95/EC) and the European WEEE Directive (2002/96/EC).

Waste Handling

In order to avoid the dissemination of hazardous substances in our environment and to diminish the pressure on natural resources, we encourage you to use the appropriate take-back systems in your area. Those systems will reuse or recycle most of the materials of your end of life equipment in a sound way.



TANDBERG products put on the market after August 2005 are marked with a crossed-out wheeled bin symbol that invites you to use those take-back systems.

Please contact your local supplier, the regional waste administration or <http://www.tandberg.net/recycling> if you need more information on the collection and recycling system in your area.

Information for Recyclers

As part of compliance with the European WEEE Directive, TANDBERG provides recycling information on request for all types of new equipment put on the market in Europe after 13 August 2005.

Please contact TANDBERG and provide the following details for the product for which you would like to receive recycling information:

- Model number of TANDBERG product
- Your company's name
- Contact name
- Address
- Telephone number
- E-mail.

Digital User Guides

TANDBERG is pleased to announce that we have replaced the printed versions of our User Guides with a digital CD version. Instead of a range of different user manuals, there is now one CD—which can be used with all TANDBERG products—in a variety of languages. The environmental benefits of this are significant. The CDs are recyclable and the savings on paper are huge. A simple web-based search feature helps you directly access the information you need. In addition, the TANDBERG video systems now have an intuitive on-screen help function, which provides a range of useful features and tips. The contents of the CD can still be printed locally, whenever needed.

声 明

此为 A 级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

WARNING:

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

TANDBERG Content Server



Introduction

We recommend that you check out the TANDBERG web site regularly for updated versions of this manual:

<http://www.tandberg.com/support/documentation.php>

The TANDBERG Content Server provides users with a quick and easy way to record video meetings and view them live or on demand. The following page provides an overview of the main features.

The TANDBERG Content Server provides users with a quick and easy way to record video meetings and view them live or on demand from their computers.

Flexible Content Creation

- Customizable Personal and System Recording Aliases automatically apply recording and streaming settings, conference permissions and metadata.
- Support for dialing in and dialing out from the Content Server.
- TANDBERG Management Suite (TMS) integration:
 - Support for Personal and System Recording Aliases through integration with TMS 11.8.
 - Backwards compatibility with TMS 11.7.

Recording

- Large scale content creation from up to five concurrent video conferences (if registered to a gatekeeper).
- Powerful predefined system templates (see [Recording Templates at a Glance](#) for a full list of system templates and their recording and streaming outputs).
- Dual Stream support for all calls.

Streaming

- Live streaming of video meetings in multiple formats and data rates.
- Multicast and unicast streaming.
- In-built Windows Media™ streaming server.
- Integration with external streaming servers for publishing Windows Media™, RealNetworks® Real Media (RealAudio® and RealVideo®) and QuickTime® compatible MPEG4 content.

Authentication

- Support for local, LDAP and domain authentication.
- Support for guest (unauthenticated access) with PIN-protection for conferences.

Permissions

- Access-list based model for viewing live and recorded conferences and editing recorded content.

Content Library

- Searchable content library for viewing live and recorded content.
- Ability to assign customized Categories to conferences and sort conferences by Category.

Content Viewing Experience

- Indexing content for quick retrieval by using the Index.
- Picture in Picture, Two Videos, Joined, and Switching layouts available.
- Ability to switch between different views of the video streams and the index (if available).

Content Editing

- Ability to add and manage index points in the Content Editor.
- Ability to set the start and end points for conference playback and create a playlist for playback of up to two conferences.

Administration

- User-friendly web-based interface for administrative system configuration.

- Access to administrative logs and Windows Server from the Content Server web interface.

Gatekeeper Settings

- Ability to register the Content Server with the gatekeeper as a Terminal or a Gateway.
- Native support for Expressway.

Scalability

- Support for media storage in an external storage location, such as Network Attached Storage.

New in Version 3.0

- Support for H.264.
- Support for encrypted H.323 calls.
- Support for SIP.
- Wide formats:
 - H.263: w228p, w448p, w576p
 - H.264: w228p, w448p, w576p, w720p
- New call model with five concurrent calls transcoded to the same formats.
- Ability to add outputs to recorded conferences for on-demand viewing with the Offline Transcoder.
- An easy-to-use, graphical Template Editor, with a wide selection of layouts and resolutions.
- Added MPEG4 format for viewing and downloads.
- Optimized downloadable media for portable devices—iPod and Zune.
- Updated Content Library interface, with thumbnails and automatic bandwidth detection.
- Fully flexible Content Viewer.
- Context-sensitive online help.

TANDBERG Content Server



Installation

We recommend that you check out the TANDBERG web site regularly for updated versions of this manual:

<http://www.tandberg.com/support/documentation.php>

An important section covering the first time installation of the Content Server. Observe that for security reasons we strongly recommend that you change the IP address from DHCP to static as soon as the unit is in production.

Preparing for Use

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What's in the Box?

To avoid damage to the unit during transportation, the Content Server is delivered in a special shipping box, which should contain the following components:

- CD with User Guide and other documentation.
- Rack-ears, screws and screwdriver.
- Cables.
- Power cable.
- Ethernet cable.
- TANDBERG Content Server.

Please report any discrepancies to your TANDBERG Representative immediately.

Rack Mounting (optional)

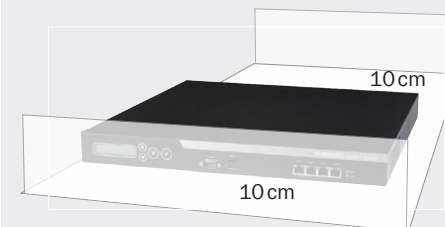
- 1 Before starting the rack mounting please make sure the TANDBERG Content Server is placed securely on a hard flat surface.



- 2 Disconnect the AC power cable, if applicable.



- 3 Make sure that the mounting space is prepared according to the [Installation Site Preparations](#) below left.



- 4 Attach the brackets to the Content Server on both sides of the unit.



- 5 Insert the Content Server into a 19" rack, and secure with screws in the front (four screws).

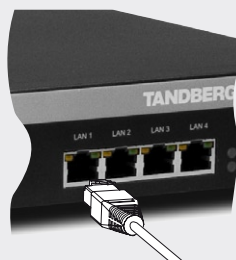


Installation Site Preparations

- Make sure the Content Server is accessible and that all cables can be easily connected.
- For ventilation: Leave a space of at least 10cm (4 inches) behind the Content Server's rear panel and 10cm (4 inches) in front of the front panel.
- The room in which you install the Content Server should have an ambient temperature between 0°C and 35°C (32°F and 95°F) and between 10% and 90% non-condensing relative humidity.
- Do not place heavy objects directly on top of the Content Server.
- Do not place hot objects directly on top, or directly beneath the Content Server.
- Use a grounded AC power outlet for the Content Server.

Connecting Cables

- 1 Connect a LAN cable from the **LAN 1** connector on the Content Server to your network. The **LAN 2, 3 and 4** connectors are not used and should be left open.



- 2 Connect the AC power cable to an electrical distribution socket. Press the power switch button at the back side to **1** to turn on the Content Server. On the front panel of the system the power indicator LED, marked **Pwr**, will light up.



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IP Address Setting Configuration

About IP Address Setting

The Content Server requires the IP Address Settings to be configured before it can be used. IP Address can be configured using the LCD Panel—see the block diagram to the right and the example on the next page.

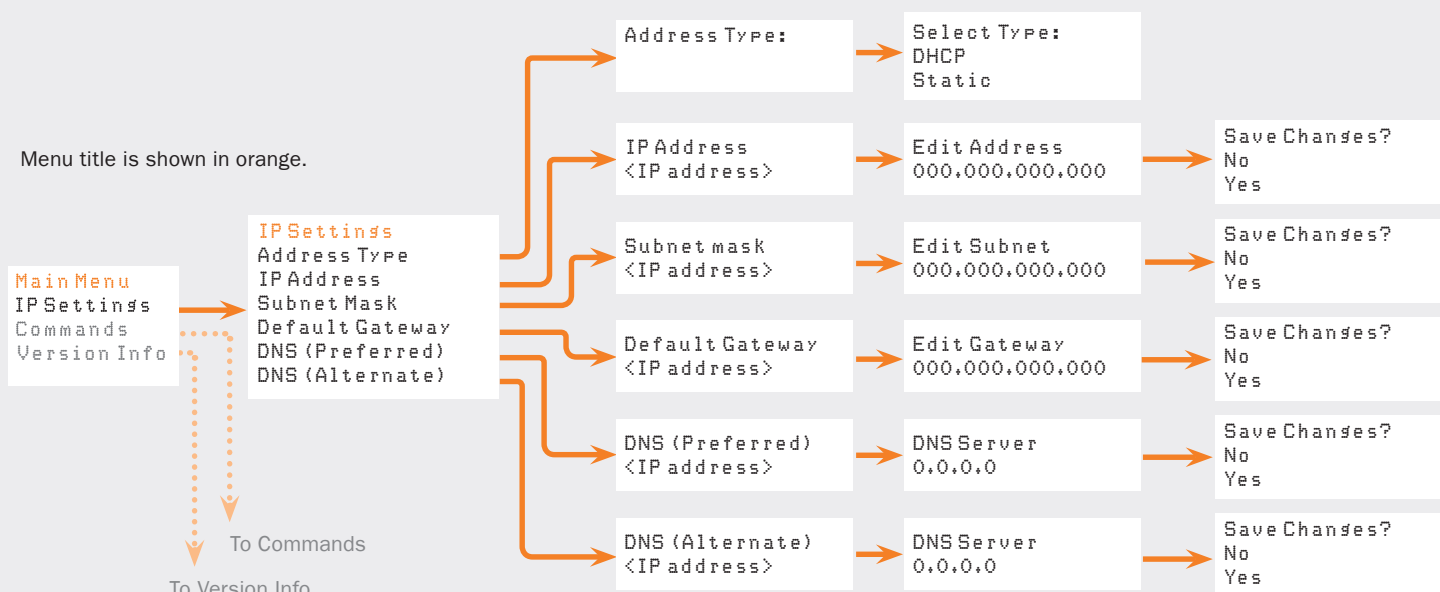
The front panel keys are used as follows:



- ✓ Use this key to enter the edit mode and confirm selection or entry.
- ✗ Use this key to return to the previous menu screen or exit the edit mode without saving the latest entry.
- ▲ Use these keys to select items in the menu, move between values in a numerical address and modify numerical values.
- ▼

IP Settings Menus Available

Menu title is shown in orange.



Examples of Front Panel Operation

Set the IP Address to Static

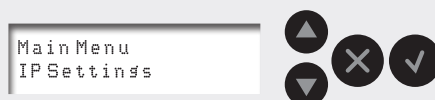
We strongly recommend that you change the IP address from DHCP to Static once the Content Server is in production.

Use the examples on this page together with the diagram on the previous page to set the IP address.

To set the subnet mask, default gateway and DNS IP addresses, follow the steps described below.

1

Press **Enter** to produce the menu. The display shows two lines at a time:

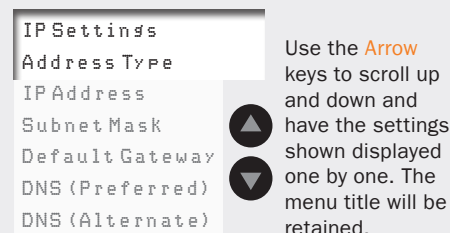


The upper line is the menu title (as shown here) or a text describing a submenu or the setting shown (as in the example to the right). The settings available can be displayed one by one (the upper line is retained) by scrolling up and down.

Example 1: Setting the IP Address Type

2

Selecting **IP Settings > Address Type**



Use the **Arrow** keys to scroll up and down and have the settings shown displayed one by one. The menu title will be retained.

The IP Settings has six submenus. Use the **Arrow** keys to locate **Address Type**

3

Press **Enter** twice to enter the submenu:

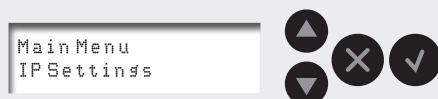


Use the **Arrow** keys to scroll down to Static. Press **Enter** to put the change into effect and proceed to specify the IP address.

Example 2: Setting the IP Address Itself

1

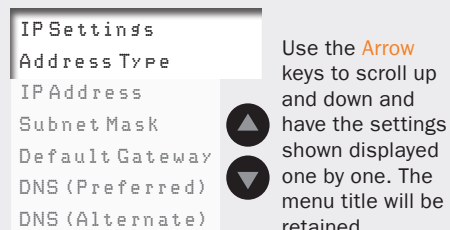
Press **Enter** to produce the menu. The display shows two lines at a time:



The upper line is the menu title (as shown here) or a text describing a submenu or the setting shown (as in the example to the right). The settings available can be displayed one by one (the upper line is retained) by scrolling up and down.

2

Selecting **IP Settings > IP Address**



Use the **Arrow** keys to scroll up and down and have the settings shown displayed one by one. The menu title will be retained.

The IP Settings has six submenus. Use the **Arrow** keys to locate **IP Address**

3

Press **Enter** to enter the submenu:



Press **Enter** to edit the address.

The first digit will now blink.

Use the **Arrow** keys to scroll through the numbers (0–9) and press **Enter** when the number requested appears. The next digit will then start to blink.

Repeat until the final digit has been set.

4

Press **Enter** to bypass any digit not in need of adjustment.

When all digits have been set pressing **Enter** will produce the **Save Changes** menu.

Use **Arrow** keys to select applicable option.

Use **Enter** to exit the menu putting changes into effect. This will take you back to the **IP Settings** menu.

If you need to change other settings repeat the procedure selecting the applicable **IP Settings** submenu (e.g. **Default Gateway**) first.

Use **Return** to leave a menu undoing any changes. This will also take you back to the **IP Settings** menu.

TANDBERG Content Server



Quick Setup

We recommend that you check out the TANDBERG web site regularly for updated versions of this manual:

<http://www.tandberg.com/support/documentation.php>

The Quick Setup section will help you get your Content Server online and operational quickly. Please note that as a security precaution, you should change the administrative password at setup time and before the Content Server is used in production.

Basic H.323 Services Setup via Content Server Interface—Step 1

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About Basic H.323 Services

A quick basic setup of your TANDBERG Content Server includes:

1. Setting up H.323 services via the Content Server interface.
2. Making a test call recording.
3. Changing the administrator password and setting up server date and time on the Windows Server.

Make sure that the E.164 aliases and H.323 IDs unique on your network are valid for your gatekeeper or border controller. By default, the Content Server's H.323 ID is set to the machine name, eg.

TANDBERG-**<random number>**. The H.323 ID of a live Recording Alias is set to **Live<machine_name>** and the H.323 ID of an on demand Recording Alias is set to **OnDemand<machine_name>**. If upgrading from S2, the machine name will be replaced by the serial number.

You can register the Content Server with either gatekeeper or border controller. For simplicity in this document we'll use gatekeeper to refer to either device.

The default local administrator account should be used for administrative functions such as system upgrades and updates and when using Remote Desktop access to the Content Server. It is therefore very important to change your password as described in the [Windows Server Setup](#) section.

For more on setting the administrative properties and user configuration, see the [Administrator Settings](#) section.

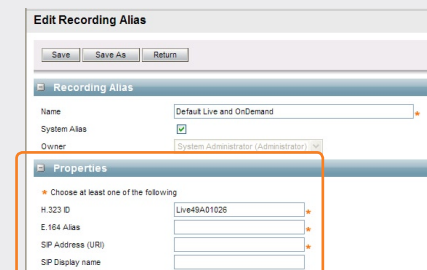
Initial Setup

- 1 Start a Web browser and enter the IP address of the Content Server. You can use either http or https, with https recommended for administrative access.

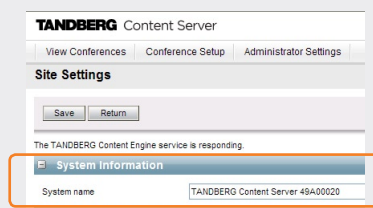
- 2 When prompted for login, enter the username **administrator** and password **TANDBERG**



- 3 Go to [Conference Setup > Recording Alias Options](#). Edit the E.164 aliases and H323 IDs for the default Recording Aliases and save.

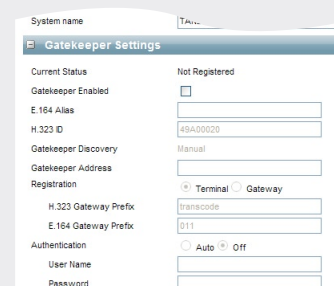


- 4 Go to the [Administrator Settings > Site Settings](#) to set the **System Name** for the Content Server.



Note: The System Name is used by TMS to identify the Content Server.

- 5 If required, set **Gatekeeper registration** to **Enabled** and set the **Gatekeeper IP address**. You can choose to register the Content Server as a Terminal or a Gateway. If you select **Gateway registration**, you will need to enter H.323 and E.164 Gateway prefixes.



- 6 Save the **Site Settings**. You may refresh the browser page to check if gatekeeper registration has been successful.

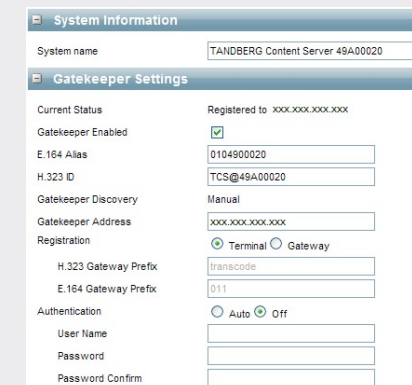


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Basic H.323 Services Setup via Content Server Interface—Step 2

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About Basic H.323 Services

A quick basic setup of your TANDBERG Content Server includes:

1. Setting up H.323 services via the Content Server interface (described on the previous page).
2. Making a test call recording.
3. Changing the administrator password and setting up server date and time on the Windows Server (described on the next page).



If the Content Server is not registered to a gatekeeper, you can make a test recording by dialing the IP address of the Content Server from an endpoint.



To read more on Recording Aliases, see [Recording Aliases](#)

Call Recording Test

- 1 If you have logged out, log back in to the Content Server web interface via [http](http://<ContentServerIPaddress>) or [https](https://<ContentServerIPaddress>).

- 2 Go to [Conference Setup](#) > [Create Conference](#).

- 3 Select a default recording alias, type the address of the endpoint you want to call and click on [Place Call](#). Alternatively, you can dial one of the recording aliases' E.164 alias or H.323 ID from your endpoint.

- 4 If the recording alias you have selected has a live stream output, you can watch the streaming call in [Live Conferences](#). Calls made with aliases which have no live streaming outputs will not be available for viewing until the call has finished and the recording has been transcoded.

- 5 You can end the call from the [Edit](#) link in [Live Conferences](#), or from the endpoint you dialed.

- 6 You can watch the on demand conference in [Recorded Conferences](#). Calls which were made with the default [On Demand](#) alias need to be transcoded before they can be watched. The progress of the transcoding process can be viewed in [Pending Conferences](#).

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Basic H.323 Services Setup via Content Server Interface—Step 3

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About Basic H.323 Services

A quick basic setup of your TANDBERG Content Server includes:

1. Setting up H.323 services via the Content Server interface (described two pages back).
2. Making a test call recording (described on the previous page).
3. Changing the administrator password and setting up server date and time on the Windows Server.



Remember to restart the Content Server every time you change date, time and time zone information.



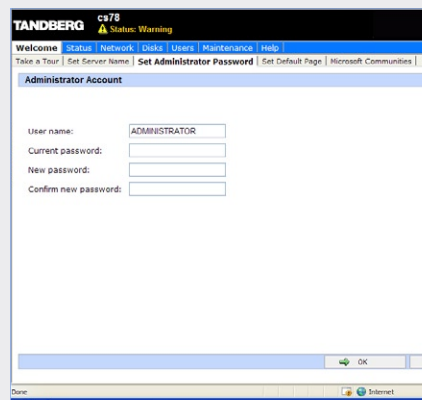
You may wish to record your new administrative password in a safe location. Please note that you should not change the default administrator account name.



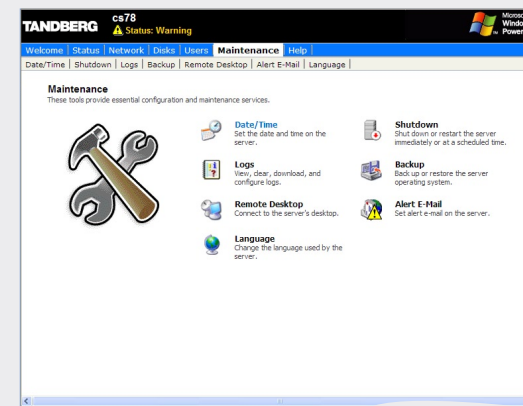
To read more on how to set the administrative properties and user configuration, see the [Administrator Settings](#) section.

Web Server Setup

- 1 Once the initial setup has been completed (previous page), log in to the Web User Interface for Microsoft Windows Server administration, <https://<ContentServerIPaddress>:8098/>, using Internet Explorer and use the [Set Administrative Password](#) tool to change your administrative password.



- 2 Go to [Maintenance](#) > [Date/Time](#) to update Date and Time settings on the server.



Recommended Next Steps

1. Register your Content Server using the Registration Card or via the web at www.tandberg.net/register
 2. Apply the most recent [security updates](#) for the Content Server
 3. Decide what your Content Server settings will be in the following areas:
 - [Authentication](#):
 - a. Use Local machine users, or
 - b. use LDAP/Active Directory users and groups (recommended).
 - Manual dial or [TMS](#):
 - a. Use in stand-alone mode with ad hoc dialing
 - b. Use with TMS 11.8 for scheduled calls.
- Review [recording template settings](#)
 - Optional – configure special case streaming resources:
 - a. Configure your servers for multicast streaming in Media Servers.
 - b. Configure external streaming servers in Media Servers
 - Optional – add new [Categories](#)
 - Configure [Recording aliases](#)
 - Review [ports](#) used by the Content Server and adjust your firewall settings if required.

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Operation

We recommend that you check out the TANDBERG web site regularly for updated versions of this manual:

<http://www.tandberg.com/support/documentation.php>

The Operation section contains important information about product registration and security updates. Procedures for restarting, shutting down and restoring the Content Server to default settings are also explained in this section.

Product Registration and Security Updates

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Product Registration

You need to register the product if you would like to receive an email from TANDBERG Constant Care Services when Content Server updates to the TANDBERG Content Server become available.

You can register using the Registration Card provided with your Content Server or via the web at www.tandberg.com/register.

You can also check the following ftp site for all available downloads:

http://ftp.tandberg.com/pub/software/content_server/

Security Updates

All relevant security updates for the TANDBERG Content Server are available from the following ftp site: http://ftp.tandberg.com/pub/software/device_security/.

IT IS IMPORTANT THAT YOU DOWNLOAD AND INSTALL THE MOST RECENT SECURITY UPDATE FOR EACH YEAR FROM THE TANDBERG FTP SITE BEFORE USING THIS PRODUCT. YOU SHOULD ALSO CHECK THIS SITE REGULARLY TO SEE IF NEW SECURITY UPDATES ARE AVAILABLE. ALL SECURITY UPDATES RELEVANT TO THE Content Server ARE CUMULATIVE THROUGHOUT THE CALENDAR YEAR.



Installing Software Upgrades and Security Updates

Content Server software upgrades and security updates need to be installed using Remote Desktop access.

Remote Desktop access is also used for:

- Scheduling backup
- Using the [TCS NAS Wizard](#).

Using Remote Desktop

- 1 Open the Remote Desktop Utility on your PC (Start>Programs> Accessories>Communications>Remote Desktop Connection).
- 2 Provide the local administrator username and password.
- 3 If you want to copy security updates or software upgrade files from your PC to the TCS desktop, click on Options>LocalResources and select Disk Drives, then click on Connect.
- 4 Once you are logged in, you can gain access to security updates or software upgrade files on your local PC by expanding My Computer. Note that mapped drives correspond to the drives on your PC.
- 5 Once you have finished the necessary installations, restart the Content Server if prompted to do so. Otherwise, terminate your Remote Desktop session by logging off. Please note that if you choose Shut down, it will shut down the Content Server!

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Shutdown and Restart

System Status

The LCD panel display indicates the current status of the Content Server.

<IP Address>
IN CALL

LCD panel display when a call is currently in progress.

<IP Address>
IDLE

LCD panel display when no calls are currently in progress.

<IP Address>
TRANSCODING

LCD panel display when transcoding is in progress.

In addition you will also find the currently installed version, as can be seen from the below menu structure.



How to use the front panel keys is explained on the next page.



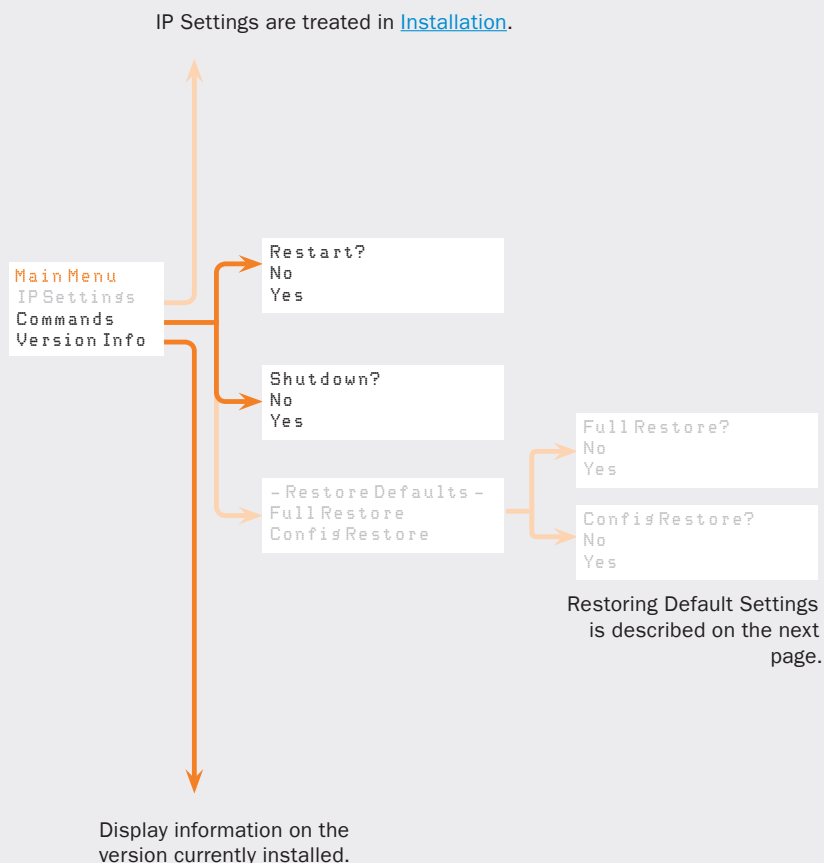
For details on how to restart the TCS service without restarting the Content Server, see the [Administrator Settings](#) section.

No Shutdown or Restart While Calls Are In Progress!



We do not recommend to shutdown or restart the Content Server while calls are in progress. If the Content Server is in a call and the server is restarted or shut down, calls in progress will fail and will not be recorded.

Command Menu Structure



Restarting the Content Server

1. Press **Enter** to display the Main Menu screen
2. From the Main Menu screen, use the **Up** or **Down** arrow to select **Commands**
3. Press **Enter** to confirm your selection
4. From the Commands menu, use the **Up** or **Down** arrow to select **Restart** and press **Enter**
5. You will be asked to confirm this action on the following screen. At the **Restart?** prompt, use the **Up** or **Down** arrow to select **Yes** and press **Enter** to confirm.

Shutting Down the Content Server

1. Press **Enter** to display the Main Menu screen
2. From the Main Menu screen, use the **Up** or **Down** arrow to select **Commands**
3. Press **Enter** to confirm your selection
4. From the Commands menu, use the **Up** or **Down** arrow to select **Shutdown** and press **Enter**
5. You will be asked to confirm this action on the following screen. At the **Shutdown?** prompt, use the **Up** or **Down** arrow to select **Yes** and press **Enter** to confirm.
6. **IMPORTANT**—wait until it is safe to shut down the Content Server and the LCD panel displays **Power off**.

Restoring to Default Settings

About Restoring to Default Settings

The administrator can restore the Content Server to default settings partially or fully via the LCD panel.

A partial restore to default settings—**Config Restore**—restores the default configuration files and templates, but does NOT affect the content stored on the server.

A full restore to default settings—**Full Restore**—removes content and deletes all media files in addition to restoring the factory configuration files and templates.



Restoring to defaults command in v.3.0 will restore the Content Server to v.3.0 defaults, but it will also remove any configurations specific to v.2.x, if the Content Server has been upgraded to v3.0 from v2.x!



Restoring to defaults—both Config Restore and Full Restore—will take about 20 minutes and **must not be interrupted!**
Logs are available in E:\logs\Restore directory.

Using the Front Panel Keys

- Used to enter the edit mode and confirm selection or entry.
 - Used to return to the previous menu screen or exit the edit mode without saving the latest entry.
 - Used to select items in the menu, move between values in a numerical address and modify numerical values.
- For an example of this, turn to [IP Address Setting Configuration](#) in the Installation section.

What Does Config Restore Do?

Deletes all user-created recording aliases, external media servers, call configuration files and templates and restores them to v.3.0 defaults.

What Does Full Restore Do?

Deletes all user-created recording aliases, external media servers, call configuration files, categories and recording templates and restores them to v.3.0 defaults.

- Deletes all conferences and media files.
- Deletes all server logs.
- If data location has been changed to an external storage location (NAS), a full restore will change the default storage location back to the Content Server.

Restoring to Default Settings

1 Press **Enter** to display the Main Menu screen.

2 From the Main Menu screen, use the **Up** or **Down** arrow to select **Commands**.

3 Press **Enter** to confirm your selection.

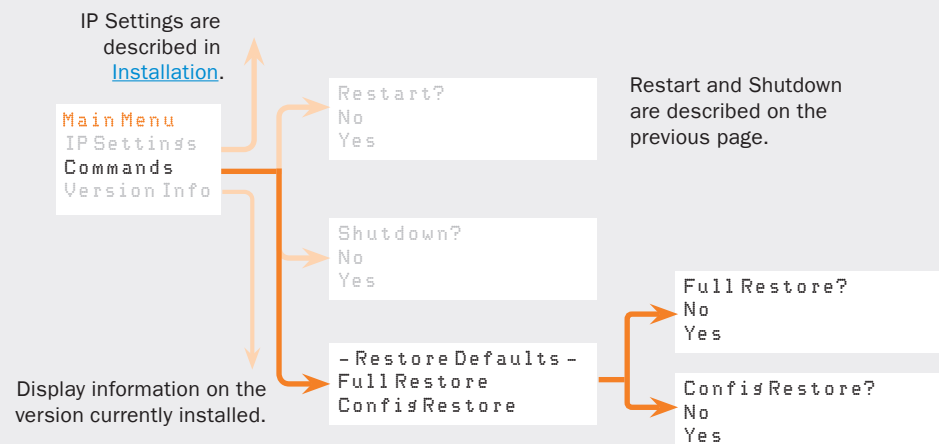
4 From the Commands menu, use the **Up** or **Down** arrow to select **Restore Defaults** and press **Enter**.

5 From the Restore Defaults menu, use the **Up** or **Down** arrow to select **Full Restore** or **Config Restore** and press **Enter**.

If you are performing a full restore, you will be asked to confirm this action on the following screen. At the **Full Restore?** prompt, use the **Up** or **Down** arrow to select **Yes** and press **Enter** to confirm.

If you are performing a partial restore, you will be asked to confirm this action on the following screen. At the **Config Restore?** prompt, use the **Up** or **Down** arrow to select **Yes** and press **Enter** to confirm.

Command Menu Structure



TANDBERG Content Server



Backing Up and Restoring the Content Server

We recommend that you check out the TANDBERG web site regularly for updated versions of this manual:

<http://www.tandberg.com/support/documentation.php>

This section describes the backup and restore procedures for the TANDBERG Content Server. Please note that scheduled backup functionality is only available in version 2.3 or higher. This document covers version 3 of the TANDBERG Content Server Administrator Guide.

Backing Up Your Content Server Application, Media and Settings

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Before You Start

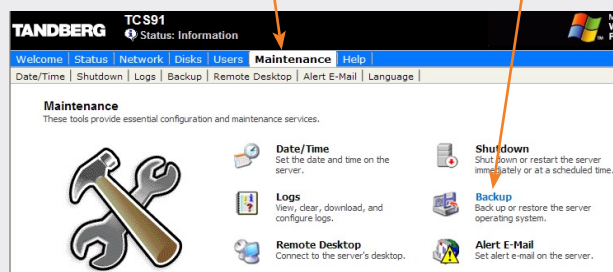
Before attempting backup, check in **Add/Remove** programs that you have Windows Server 2003 Service Pack installed. Please ensure that Service Pack 2 is installed on the Content Server before proceeding with backup.

Visit http://www.tandberg.com/support/tandberg_device_security.jsp for instructions on how to install Microsoft Windows Server 2003 Service Pack 2 on the TANDBERG Content Server.



You will need a USB Hard drive with enough space for all files to be backed up. Check the total size of the files to be backed up on your Content Server (in My Computer). You can also back up to a network location.

- 3 Click on the **Maintenance** tab, then select the **Backup** link.



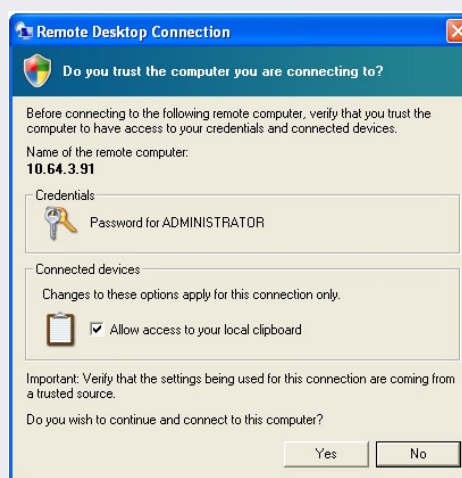
The Backup Procedure

- 1 If you are not backing up to a network location, connect a USB hard drive to a USB port on the Content Server. If the USB device does not appear in **My Computer**, go to **Computer Management** and assign a drive letter which does not conflict with the existing drives (eg. F).

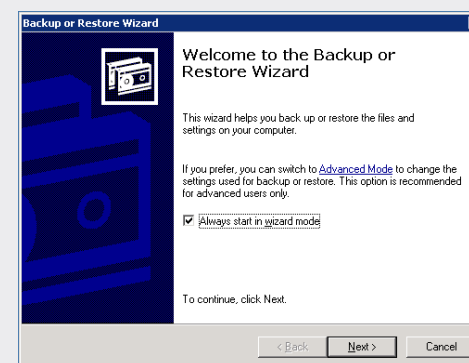
- 2 Login to the web interface using Internet Explorer and select **Windows Server** from the **Administrator Settings** menu.

If you are not using Internet Explorer, you can also open the Backup Wizard from a Remote Desktop session. Go to **Start > All Programs > Accessories > System Tools > Backup**

- 4 Authenticate to open a **Remote Desktop** connection. If your Internet Explorer 7 settings prevent you from running Active X scripts, you may need to add the Content Server to your **Trusted Sites** list in IE.



- 5 Start the **Backup and Restore Wizard**.



more...

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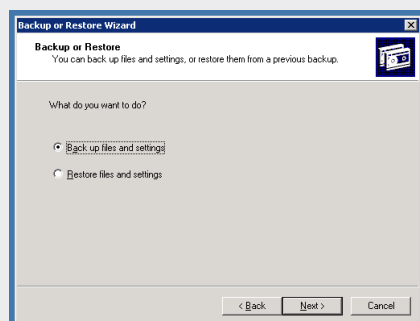
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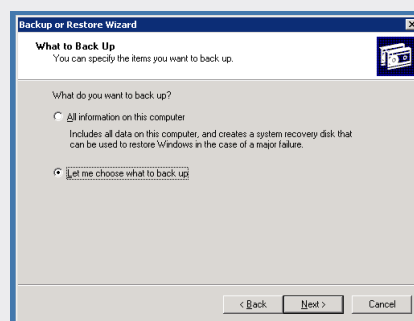
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The Backup Procedure cont.

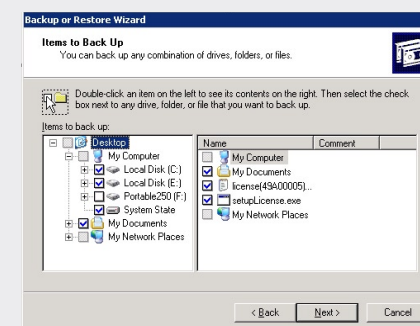
6 Select **Back up files and settings**.



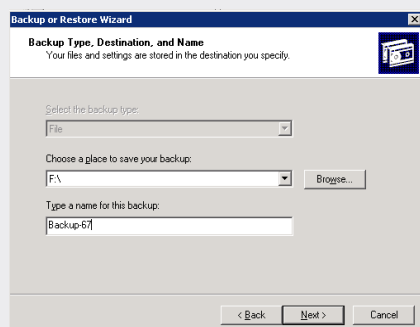
7 From the **What to Back up** screen, select **Let me choose what to back up**.



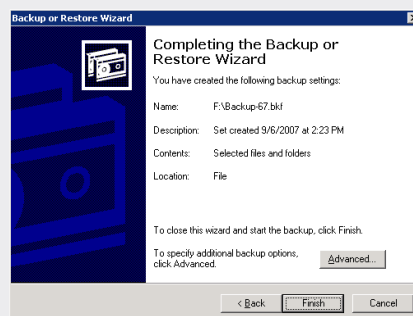
8 From the **Items to back up** screen, select the check boxes next to: **Local Disk [C:], Local Disk [E:] and System State**



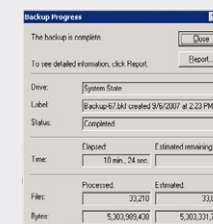
9 From the **Backup Type, Destination and Name** screen: Browse to the network location or USB Hard Drive you want to use for your backup. Type a name for your backup.



10 The below screen, **Completing the Backup or Restore Wizard**, will summarize your backup information. Click on **Finish** to start your backup.



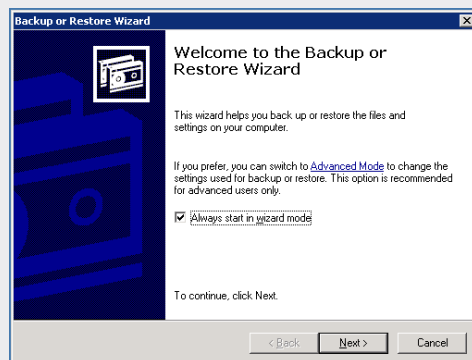
11 The backup process takes approximately 10 minutes per 5GB of data. Backup progress is reported on screen and a detailed report is provided at the end of the process.



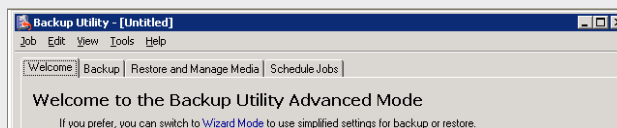
Your backup is now complete!

The Scheduling Backup Procedure

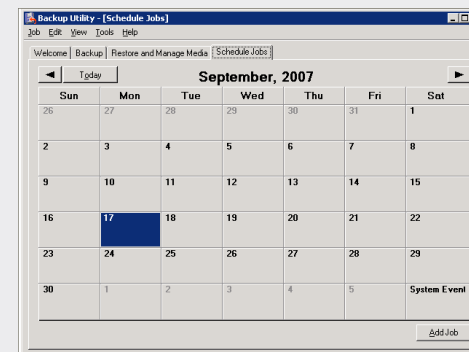
- 1 Open the **Backup and Restore Wizard** as described on the previous pages. Select **Advanced Mode**.



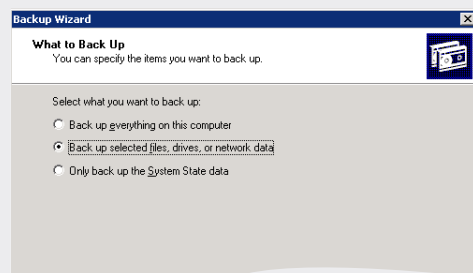
- 2 Click on the **Schedule Jobs** tab.



- 3 Click on the **Add Job** button.



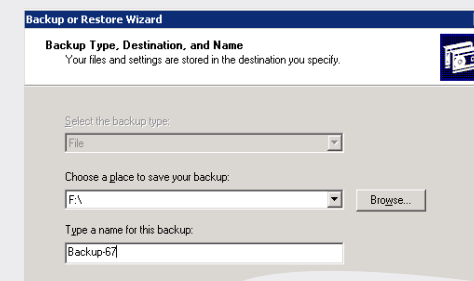
- 4 This will open the **Backup Wizard**. From the **What to Back up** screen, select **Back up selected files, drive, or network data**. Click **Next**.



- 5 From the **Items to back up** screen, select the check boxes next to: Local Disk [C:], Local Disk [E:] and System State.



- 6 From the **Backup Type, Destination and Name** screen: Browse to the network location or USB Hard Drive you want to use for your backup. Type a name for your backup.



more...

The Scheduling Backup Procedure cont.

- 7** From the **Type of Backup** screen, select the type of backup from the following options:

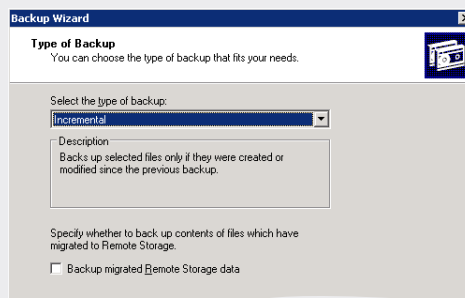
Normal. Backs up selected files and marks each file as backed up

Copy. Backs up selected files but does not mark any as backed up

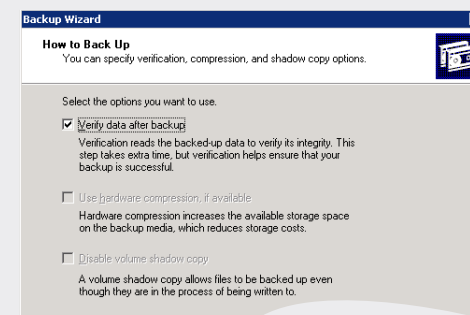
Incremental. Backs up selected files only if they were created or modified since the previous backup

Differential. Backs up selected files only if they were created or modified since the previous backup but does not mark them as backed up

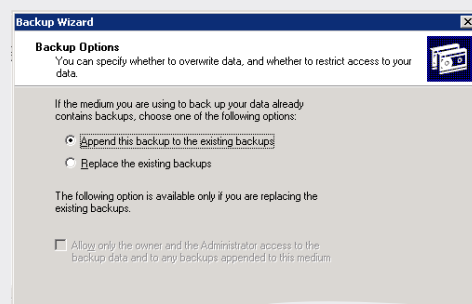
Daily. Backs up only files that were created or modified today.



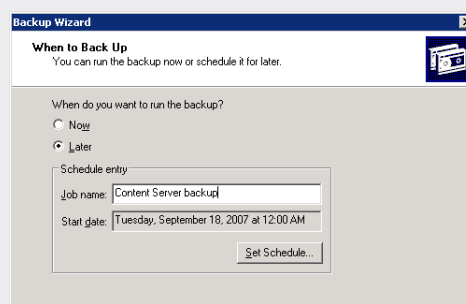
- 8** From the **How to Backup** screen, select **Verify data after backup**.



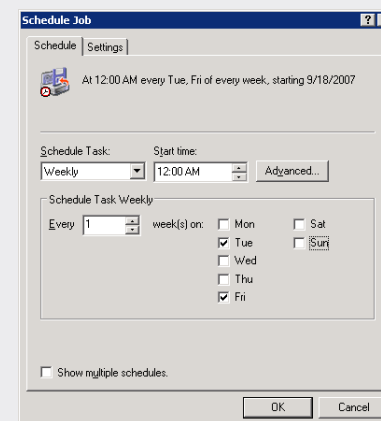
- 9** From the **Backup Options** screen, select **Append this backup to the existing backups**.



- 10** From the **When to Backup** screen, select **Later** and click on the **Set Schedule** button to make your scheduling selections.



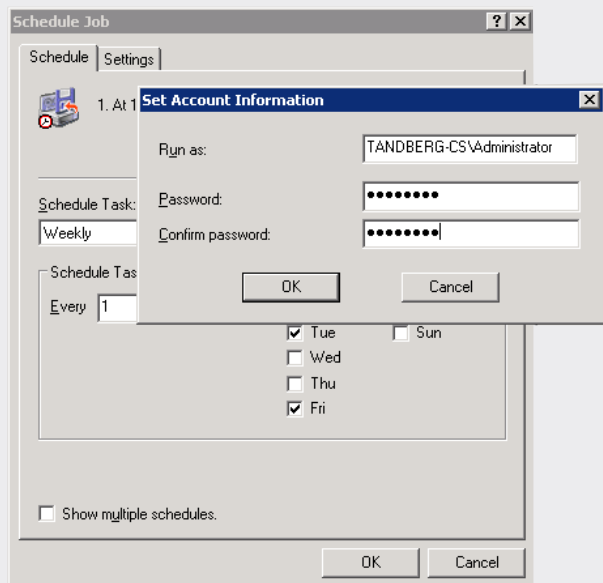
Example settings are shown in this screenshot.



more...

The Scheduling Backup Procedure cont.

- 11 After clicking **OK**, you will be prompted twice to supply the password for the account that the backup will run under.



- 12 The below screen, **Completing the Backup or Restore Wizard**, will summarize your backup information. Click on **Finish** to schedule the backup



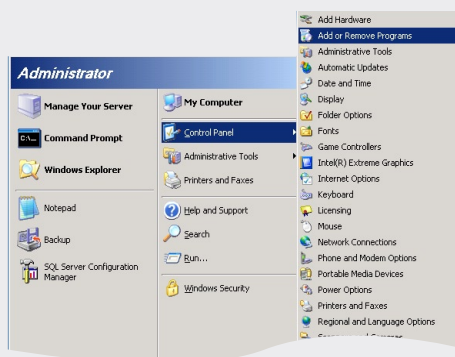
Restoring your Content Server Application, Media and Settings

TANDBERG CONTENT SERVER
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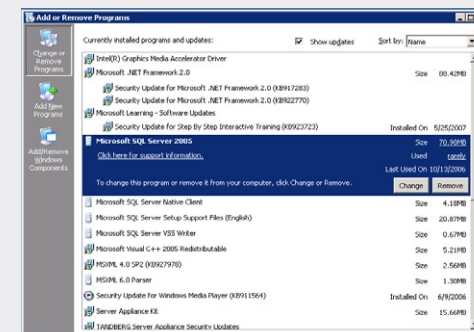
The Restoring Procedure

- 1 End any calls in progress and open **Remote Desktop** access to your Content Server.

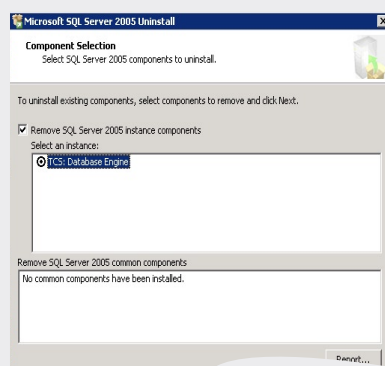
- 2 Uninstall the TANDBERG Content Server. From **Start > Control Panel**, open **Add or Remove Programs**. Select **TANDBERG Content Server** and click on **Change**. At the following screen, select the **Remove** option.



- 3 Uninstall the Microsoft SQL Server 2005. Select **Microsoft SQL Server 2005** and click on **Remove**.



- 4 In the following **Component Selection** screen, select **TCS database Engine** and click on **Next**.



- 5 From the **Add/Remove Programs**, uninstall **Microsoft SQL Server VSSWriter** and **Microsoft SQL Server Setup Support Files**.

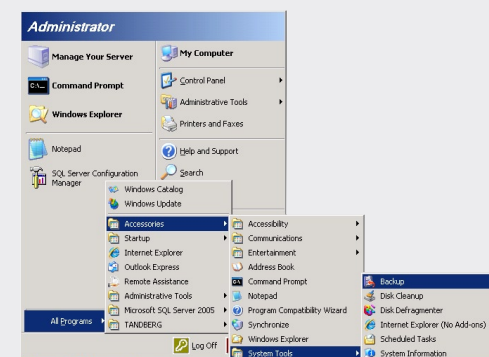
Browse to **C:\Windows\Security**

Look for files called **edb*.log**, there should be **edb.log** and at least one or two others maybe more (often called **edbtmp.log** or **edb0000*.log**).

DO NOT delete edb.log, but delete the other one or two files.

Not removing these files could result in future upgrades failing following the restore.

- 6 Go to **Start > All Programs > Accessories > System Tools > Backup**.



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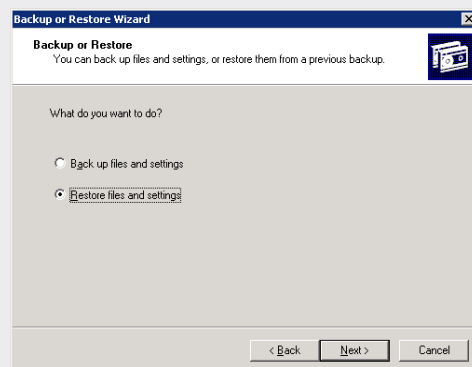
Appendices

Restoring your Content Server Application, Media and Settings... cont.

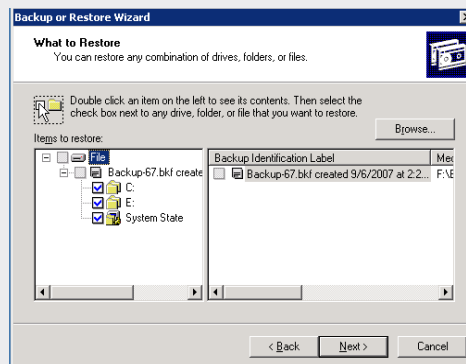
TANDBERG CONTENT SERVER
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The Restoring Procedure cont...

- 7 Start the **Backup Wizard**. Select **Restore files and settings**.



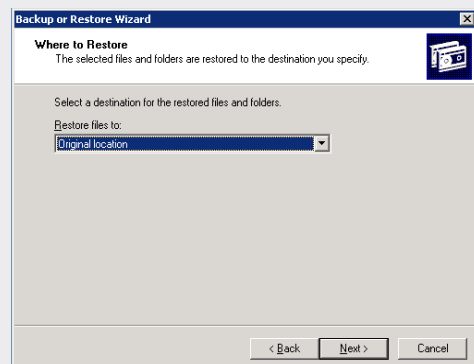
- 8 From the **What to restore** screen, select the check boxes next to: **Local Disk [C:]**, **Local Disk [E:]**, and **System State**



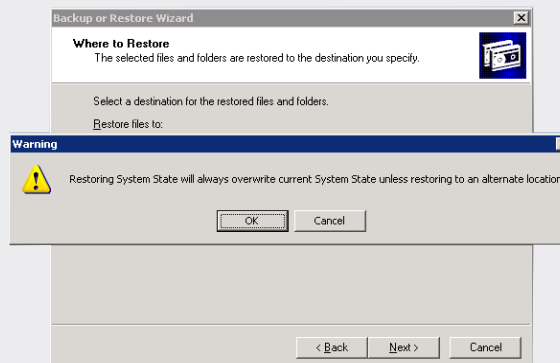
- 9 Click on **Advanced...** from the following screen, **Completing the Backup or Restore Wizard**.



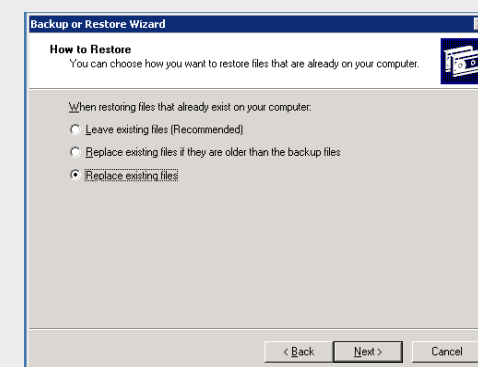
- 10 From **Where to restore** screen, leave the default setting—**Original location**.



- 11 Acknowledge the following warning about System State restore.



- 12 From the **How to restore** screen, select **Replace existing files**.



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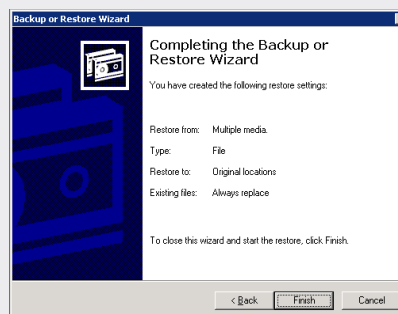
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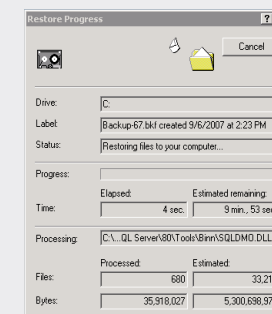
- 13 Leave the default options selected on the **Advanced Restore Options** screen.



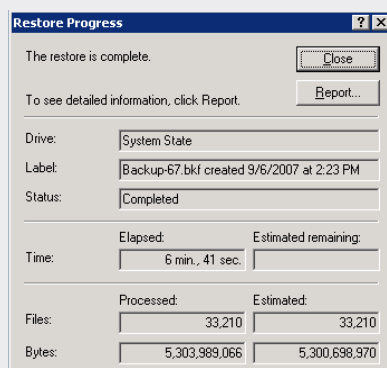
- 14 Click on Finish on the following screen, **Completing the Backup or Restore Wizard** to start the restore process.



- 15 The progress of the restore is shown on screen.



- 16 Once the restore has completed, more detailed information can be obtained by clicking on the **Report** button.



- 17 YOU MUST RESTART THE COMPUTER AFTER THE RESTORE PROCESS.

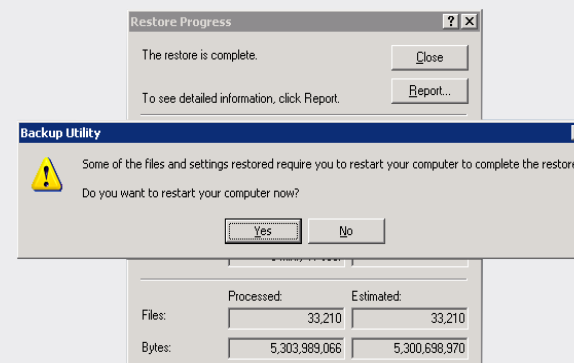


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TANDBERG Content Server



Administrator Settings

We recommend that you check out the TANDBERG web site regularly for updated versions of this manual:

<http://www.tandberg.com/support/documentation.php>

Read the Administrator Settings section to familiarize yourself with the administrative menu functions important for the correct configuration and functioning of the Content Server. This section explains the Site Settings, User and Category management. It allows you to edit and create recording and call configuration templates which determine the output of your recordings. The Administrator Settings menu gives you access to view Server logs, view and add option keys, and view the storage location of your media.

Viewing Administrator Settings

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About Administrator Settings

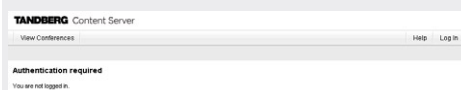
The administrator needs to review the administrator settings and configure the settings based on the requirements of the installation site.

Configuration settings can be made via the **Administrator Settings** menu.

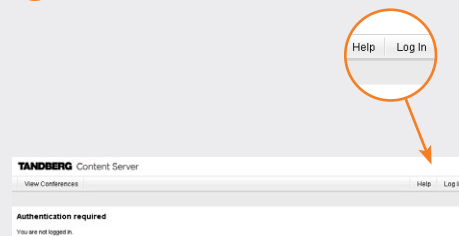
Factory default user name for the local administrator account is **administrator** and factory default password is **TANDBERG**. It is strongly recommended that you change the administrative password at setup time and before the Server is used for production.

Logging In to View the Administrator Options

- 1 Use a web browser to log in to the Content Server interface via http or https://<ContentServerIPAddress>.



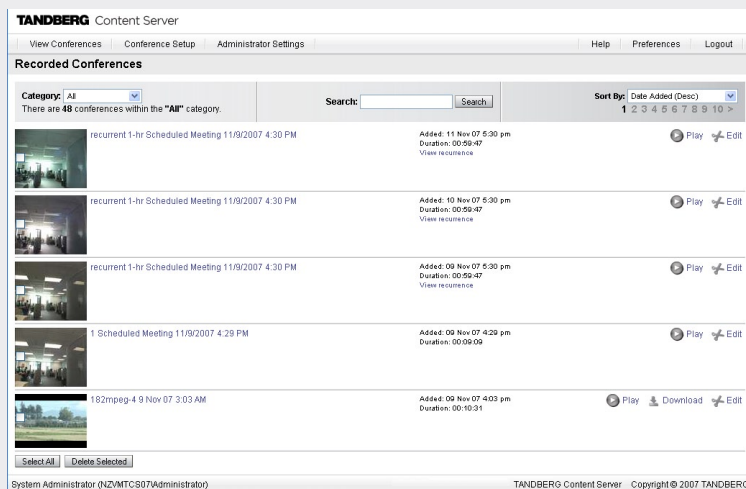
- 2 Click on **Login**.



- 3 Enter your administrator user name and password.



- 4 Once successfully logged in, the screen will display your display name and user name at the bottom left of the screen, with menu items now available according to your login privileges.



- 5 Click on **Administrator Settings** to display the options available. These are described on the following pages.

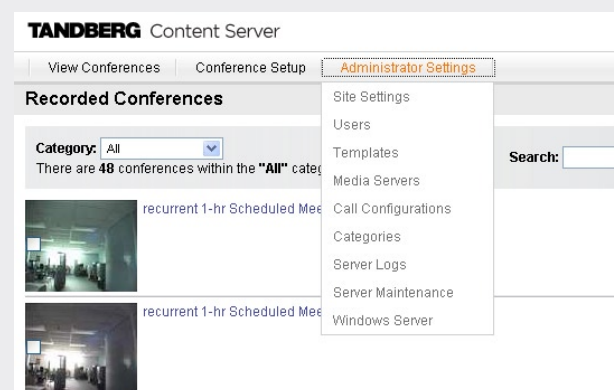


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About Site Settings

Administrators need to review configuration information in the **Site Settings** menu to ensure that the system is configured properly for their installation site.



All changes made in the **Site Settings** page need to be confirmed by clicking the **Save** button at the top or bottom of the page.

Site Settings contain:

- System information
- Gatekeeper settings
- Advanced H.323 settings
- SIP settings
- Authentication
- API
- User properties
- System Defaults

These are described on the following pages.



The  indicates that this topic is expandable in the usual way. Once expanded, the sign changes to  to show that the topic can be collapsed again.

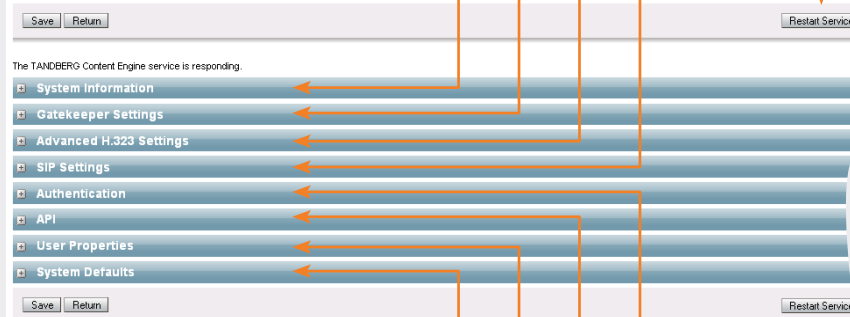


If the Content Server is in a call, the administrator is unable to edit the current site settings. The **Site Settings** page will contain the text:

Cannot edit Site Settings—Content Server is currently in a call.

The Site Settings

Site Settings



Restart Service

Treated in detail in [System Information](#).

Treated in detail in [Gatekeeper Settings](#).

Treated in detail in [Advanced H.323 Settings](#).

Treated in detail in [SIP Settings](#).

If the TANDBERG Content Service is recording calls at the time, the site setting interface will indicate this and all site settings will be disabled except for the **Restart Service** button.

If you click on the **Restart Service** button while the Content Server is in call, the following message will be displayed:

If you restart the Content Server service, calls which are currently in progress will fail. Are you sure you want to restart?

Restart Service will terminate calls that are currently live (that is, the calls will be ended and conferences will not be available for on demand playback).

Treated in detail in [Authentication](#).

Treated in detail in [API](#).

Treated in detail in [User Properties](#).

Treated in detail in [System Defaults](#).

System Information Settings

Restart Service. This will terminate calls that are currently live (that is, the calls will be ended and conferences will not be available for on demand playback).

Before restarting the service, check if there are live conferences in progress in the [Live Conferences](#) page or check the call status on the LCD panel of the unit. The [Site Settings](#) page will also display a warning if calls are in progress. If you click on the [Restart Service](#) button while calls are in progress, you will be asked to confirm if you want to go ahead with the restart.

System Name. Enter the name for the Content Server.



The System Name is used in the TANDBERG Management Suite to identify added Content Servers. It is not the same as the S2 "System Name" as that was the H.323 ID.

TANDBERG Content Server

View Conferences | Conference Setup | Administrator Settings | Help | Preferences | Logout

Site Settings

Save Return Restart Service

The TANDBERG Content Engine service is responding.

System Information

System name: TANDBERG Content Server 49A01026

The Gatekeeper Settings

Current Status. Displays the status of Content Server registration with the gatekeeper (registered or not registered).

Gatekeeper Enabled. Choose **Enabled** to register with the gatekeeper.

E.164 Alias. Other systems can call the Content Server using the E.164 Alias, if the Content Server is registered to the gatekeeper. The recording alias specified in the **Default Recording Aliases** will be used for the call.

H.323 ID. Other systems can call the Content Server using the H.323 ID, if the Content Server is registered to the gatekeeper. The recording alias specified in the **Default Recording Aliases** will be used for the call.

Gatekeeper Address. This gatekeeper IP-address will be used.

Registration. Choose to register the Content Server as a **Terminal** or as a **Gateway**.

H.323 Gateway Prefix. Alias prefix if registered as a gateway.

E.164 Gateway Prefix. Alias prefix if registered as a gateway.

The screenshot shows the 'Gatekeeper Settings' window. Callouts from the left-side text boxes point to the following fields in the form:

- Current Status:** Registered
- Gatekeeper Enabled:** ☒
- E.164 Alias:** 1029088
- H.323 ID:** TANDBERG-2AB501
- Gatekeeper Discovery:** Manual
- Gatekeeper Address:** 10.64.0.99
- Registration:** ☒ Terminal ☐ Gateway
- H.323 Gateway Prefix:** (empty field)
- E.164 Gateway Prefix:** (empty field)
- Authentication:** ☐ Auto ☒ Off
- User Name:** (empty field)
- Password:** (empty field)
- Password Confirm:** (empty field)

Restart Service (see [Site Settings](#)) will terminate calls that are currently live (that is, the calls will be ended and conferences will not be available for on demand playback).

Before restarting the service, check if there are live conferences in progress in the **Live Conferences** page or check the call status on the LCD panel of the unit. The **Site Settings** page will also display a warning if calls are in progress. If you click on the **Restart Service** button while calls are in progress, you will be asked to confirm if you want to go ahead with the restart.

Gatekeeper Discovery configuration is set to **Manual**.

Authentication. By default, gatekeeper authentication is set to Off. If authentication is required, change to Auto and supply the User name and Password.

User name. Enter the user name to authenticate toward the gatekeeper.

Password. Enter the password to authenticate toward the gatekeeper.

Password confirm. Re-enter the password.

The Advanced H.323 Settings

Use Static Ports is disabled by default. This means that the system will dynamically allocate which ports to use when opening a TCP/UDP connection.

Static ports can be enabled by selecting the checkbox and specifying the required range of ports.

Port Range. 3230 to 3270 is the standard firewall port range. It needs to be configured according to your local firewall settings.

NAT. Network Address Translation is used when the Server is connected to a router with NAT support. The default setting for NAT is **Off**.

If NAT is **On**, the system will signal the configured NAT address in place of its own IP address within Q.931 and H.245.

If NAT is set to **Auto**, the system will try to determine whether the NAT address or the real IP address should be used for signaling. This is done to make it possible to make calls to endpoints on the LAN as well as WAN.



Changes to any fields in this section require you to Restart Service.

Advanced H.323 Settings

Changes to any of these fields require you to restart the TANDBERG Content Engine service.

Use Static Ports ☐

Port Range to 3270

NAT ☐ On ☒ Off ☐ Auto

NAT Address

Restart Service. (see [Site Settings](#))

Restart Service will terminate calls that are currently live (that is, the calls will be ended and conferences will not be available for on demand playback).

Before restarting the service, check if there are live conferences in progress in the [Live Conferences](#) page or check the call status on the LCD panel of the unit. The [Site Settings](#) page will also display a warning if calls are in progress. If you click on the [Restart Service](#) button while calls are in progress, you will be asked to confirm if you want to go ahead with the restart.

NAT Address. The NAT address must be the global, external address to a router with NAT support. In the router, the following ports must be routed to the system's IP address:

Port 1720

Port 2326–2365

The port range specified by the [Port Range](#) field.

Please contact your TANDBERG representative or authorized reseller for more information.

The SIP Settings

Status. Displays the status of Content Server registration with the SIP registrar.

Display name. Enter the Content Server's SIP display name.

Server Discovery is Manual. The IP of the Server must be entered below.

Server Type. Select the type of SIP registrar. The default setting is **Auto**, which supports registering to standard SIP servers like OpenSer.

User name. Enter the user name to authenticate toward the SIP server.

Password. Enter the password to authenticate toward the SIP server.

Password confirm. Re-enter the password.

Sip Alias Registrations

Return

Status

Current Status: SIPSRV_ACTIVE

Registrations Displays all Aliases that are registered to the Sip Server.

1. tcs101@tandberg.com (Registered)
2. tcs101ve2@tandberg.com (Registered)

Return

SIP Settings

Current Status: Active (5 of 5 aliases registered) [View all SIP registrations](#)

SIP Enabled: ☒

SIP Display name: TCS102

SIP Address (URI): TCS102@tandberg.com

Server Discovery: Manual

Server Address: 10.47.1.58

Server Type: Auto

Transport: TCP

User Name:

Password:

Password Confirm:

Status: Displays the status of Content Server registration with the SIP registrar.

Registrations: Displays all Aliases that are registered to the Sip Server.

The clickable link **View all SIP registrations** link to the **SIP Alias Registration** screen.

SIP enabled. Select to enable registration with a SIP registrar.

SIP Address (URI). Other systems can call the Content Server using the SIP Address or URI (Uniform Resource Identifier) if the Content Server is registered to a SIP registrar. The recording alias specified in the Default Recording Aliases will be used for the call.

Server Address. Enter the IP address or a fully qualified domain name of the SIP registrar.

Transport. Choose the transport protocol for SIP. The default transport method is TCP (Transmission Control Protocol). UDP (User Datagram Protocol) can also be used.

The Authentication Settings

Authentication. Choose the authentication method for the Content Server.

Choose Local. If you select local authentication, only users with valid local accounts who have been added through the **User Management** page will be able to log in. Local groups are not supported.

Choose Domain. If you select domain authentication, the Content Server must be added to the domain, and details of the LDAP server used for authentication must be filled out in the fields below. Please see the sidebar to the right for more notes on domain authentication.


Choose LDAP. If you select LDAP authentication, details of the LDAP server used for authentication must be filled out in the fields below.

Please see the sidebar to the right for more notes on LDAP authentication.

Add LDAP Server. Allows you to add up to four additional servers that the content server will look up to authenticate users.

Server address. Enter the DNS name or IP address of your LDAP server. Only Microsoft Active Directory Server is supported for 3.0 and 2.x versions of the Content Server.

Port. Port 389 is the default port for most Domain Controllers. Global Catalog Servers may use port 389 or 3268.

LDAP Server. Click on the  to expand this section and enter your server details.



Both LDAP and Domain authentication methods require the details of a Microsoft Active Directory Server to be entered in the Authentication section. At this time, only Microsoft Active Directory Server is supported by the TANDBERG Content Server.

Clicking on the **Save** button (see [Site Settings](#)) will perform a check of the LDAP server settings as the Content Server attempts to bind to the LDAP server. Changes to Site Settings will not be saved if the LDAP settings entered are incorrect.

Domain Authentication

Domain authentication can only be used if the Content Server has been added to the domain. If you add the Content Server to an existing domain, you need to define a separate security policy for the server, otherwise the existing security policies may prevent the server from functioning correctly. Please contact your authorized TANDBERG reseller or partner for details of the recommended security policy settings.

Under Domain authentication, users with domain accounts and local users are able to log in. The local administrator account can be used to administer the server, or some domain users can be given administrative privileges.

LDAP Authentication

LDAP authentication does not require the Content Server to be added to a domain.

Before changing authentication from local to LDAP, the local administrator must add at least one LDAP user with administrative privileges to the Content Server. To do this, go to **User Management > Add Users** and enter at least one valid username in the **Add Administrators** section.

Under LDAP authentication local users cannot log in using the standard login method. However, the local administrator can log in by adding the following string: `#page:login&rescue:true` to the end of the Content Server URL of the browser:

Example: The URL will look something like:

<http://<ContentServerIPAddress>/tcs/#page:login&rescue:true>

Hit the Enter key on your keyboard and log in with the local administrator account in the resulting pop-up window.

While it is possible for the local administrator to login using this method, it is more convenient to give an LDAP user account administrative privileges.

The Authentication Settings

Base DN. This is the search base which the Content Server uses to search for user records. The Content Server will search the object specified by the Base DN (Distinguished Name) and any objects beneath it.

The Base DN is a unique name for this container. It consists of OU, CN, and DN components.

Base DN examples:

OU=employees,DC=company,DC=com OU=marketing,OU=employees,DC=company,DC=com

In the examples above, OU 'marketing' is contained within the OU 'employees', so OU=employees,DC=company,DC=com will identify all employees of the company including the Marketing department, and OU=marketing,OU=employees,DC=company,DC=com will identify users from the Marketing department only.

Site Settings

Save Return

★ Changes to one or more of these fields require you to restart the service. Restart Service

The TANDBERG Content Server service is responding.

System Information

Gatekeeper Settings

Advanced H.323 Settings

SIP Settings

Authentication

Authentication ☐ Local ☐ Domain ☒ LDAP

Add LDAP Server

LDAP Server

Server Address ldap.company.com e.g. ldap.company.com

Port 389 e.g. 389

Base DN OU=users,DC=company,DC=com e.g. OU=users,DC=company,DC=com

User DN CN=username,OU=users,DC=company,DC=com e.g. CN=username,OU=users,DC=company,DC=com

Password *****

Password Confirm *****

Remove LDAP Server

API

User Properties

System Defaults

Save Return

User DN. This is the LDAP identifier of the account in your domain which the Content Server will use to identify the user who is trying to log in. This account must have read membership privileges, that is, privileges to retrieve users' 'memberOf' attributes from Active Directory using LDAP. You can use an existing account or create a new special account with those privileges. This account does not need to be inside the search tree specified in Base DN.

The User DN (Distinguished name) is a unique name for this account. It consists of:

- CN (Common Name) of the special account
- OU (Organizational Unit)
- DC (Domain Object Class)

User DN examples: CN=user_account,OU=employees,DC=company,DC=com CN=user_account,OU=marketing,DC=company,DC=com

Please note that DNs can have many more than four parts.

Password. Enter the password for the account identified above.

Confirm Password. Enter the password again to verify that it was entered correctly.

The API Settings

The API is enabled by default and must stay enabled in the following cases:

- If integration with TMS is required.
- If the API is used for customized integration with other systems. Refer to the TANDBERG Content Server API Documentation for details of available API calls.



Refer to the TANDBERG Content Server API Documentation D1398002, for details of available API calls.



The default API password at install is **TANDBERG**. It is strongly recommended that you change this password if you want the API to remain enabled. If you clear the password and the password field is empty, API clients will not receive an authentication challenge.

Site Settings

Save Return

★ Changes to one or more of these fields require you to restart the service.

Restart Service

The TANDBERG Content Server service is responding.

System Information

Gatekeeper Settings

Advanced H.323 Settings

SIP Settings

Authentication

API

API Enabled



User Name

admin

Password

••••••••

Password Confirm

••••••••

User Properties

System Defaults

Save Return

The User Properties Settings

Choose this option to allow guest access to the Content Server. When **Allow Guest Access** is checked, users do not have to authenticate to view conferences. Anyone can view all conferences that have **Allow access to all users** checkbox selected in **Conference permissions**.

The screenshot shows the 'Site Settings' interface. At the top, there are 'Save' and 'Return' buttons. Below them is a message: '★ Changes to one or more of these fields require you to restart the service.' followed by a 'Restart Service' button. A status message reads: 'The TANDBERG Content Server service is responding.' Below this is a list of settings categories, each with a plus icon and a minus icon: 'System Information', 'Gatekeeper Settings', 'Advanced H.323 Settings', 'SIP Settings', 'Authentication', 'API', 'User Properties' (which is currently selected and highlighted), and 'System Defaults'. Under the 'User Properties' section, there is a checkbox labeled 'Allow Guest Access' which is currently unchecked. At the bottom of the settings panel, there are 'Save' and 'Return' buttons.

The System Default Settings

Default Recording Alias. If the system E.164 alias, system name or content server IP address is called from an endpoint, the **Recording Alias** specified here will be used for recording and/or streaming the call.

The **Recording Alias** determines:

- The call settings, based on the call configuration specified in the alias.
- The outputs, based on the recording template specified in the alias.
- Access to the live and recorded conference.
- Conference password (optional).
- All conference metadata, such as the conference name, description, speaker, location, copyright and category specified in the Alias will be automatically applied to the conference and can be edited before the call is placed and also after the call has finished.



For more information on this – see [Recording Aliases](#).

Default Media Servers. Servers specified in this section will be used by default in new templates.

- **Live Windows Media.** The Local Windows Media Streaming Server is used by default. An external streaming server can be configured in Media Servers and then selected as a default media server for streaming Windows Media live.
- **Live MPEG4.** By default, it is not possible to stream MPEG4 live off the content server. An external media server such as Darwin or QuickTime streaming server can be configured in Media Servers and then selected as a default media server for streaming MPEG4 live.
- **Live Real Media.** By default, it is not possible to stream Real Media live off the content server. An external media server such as a Helix streaming server can be configured in Media Servers and then selected as a default media server for streaming Real Media live.
- **On Demand Windows Media.** The Local Windows Media Streaming Server is used by default. An external streaming server can be configured in Media Servers and then selected as a default media server for streaming Windows Media on demand.
- **On Demand MPEG4.** By default, the Local IIS Web Server is configured to deliver MPEG4 media as a progressive download (http streaming). An external media server such as Darwin or QuickTime streaming server can be configured in Media Servers and then selected as a default media server for streaming MPEG4 on demand.
- **On Demand Real Media.** By default, the Local IIS Web Server is configured to deliver Real Media as http streaming. An external media server such as a Helix streaming server can be configured in Media Servers and then selected as a default media server for streaming Real Media on demand.

About User Management

The **User Management** menu is used to add new users, change user privileges and delete users.

GUEST ACCESS

The Content Server supports guest access to view conferences. If you want guest users to view conferences without having to log in to the Content Server:

- Select **Allow Guest Access** checkbox in **Site Settings**, and
- Select **Allow access to all users** checkbox in **Conference permissions** for all or some conferences.

With guest access, users only need to enter the Content Server IP address in their browser and they do not have to authenticate at all to view those conferences. In this case, you only need to add users who will have to authenticate (log in) to get special privileges, such as administrators and owners.

AUTHENTICATED ACCESS

The Content Server also supports authenticated access to view conferences. If you want only authenticated users to view conferences, make sure that the **Allow Guest Access** checkbox is deselected in **Site Settings**. In this case, you have to add all users who need access to view, edit or administer content (through the **Add Users** page). If you select **Allow access to all users** checkbox in **Conference permissions**, those conferences will be available for viewing by all authenticated users.

AUTHENTICATED AND GUEST ACCESS

It is also possible to have a mixture of guest and authenticated access for viewing conferences. If you want some conferences to be available to everybody, and other conferences restricted to authenticated users:

- Select **Allow Guest Access** checkbox in **Site Settings**, and ...
- Select **Allow access to all users** checkbox in **Conference permissions** for conferences you want guests to see.
- Add users and/or groups who need to login to the Content Server (through the **Add Users** page) and then enter user- or group names in **Conference permissions** for conferences that only those authenticated users should be able to view.

Depending on the authentication method chosen in **Site Settings**, administrators can add local users (who have been created on the local computer) or users (or groups) authenticated via LDAP.

The User Manager Settings

TANDBERG Content Server

View Conferences | Conference Setup | Administrator Settings | Help | Preferences | Logout

Users

| <input type="checkbox"/> | User Name | Display Name | User Role | User/Group |
|--------------------------|------------------------------------|----------------------|----------------------|------------|
| <input type="checkbox"/> | Administrator Edit | System Administrator | System administrator | User |
| <input type="checkbox"/> | jeremy.mould Edit | Jeremy Mould | Authenticated user | User |
| <input type="checkbox"/> | ross.dewstow Edit | Ross Dewstow | Conference creator | User |

[Delete Selected](#) [Add Users](#)

There may be too many users to be displayed on a single page with the selected number of users displayed per page. Go to the other pages here.

By clicking on **User Name**, **Display Name**, and **User Role** you may change the sorting order.

Click here to add new users. Details on this can be found on the next page.

Click here to delete the users selected.

Select users to be deleted. Use the checkbox above the column to select all users.

Adding Users (I)

About Adding Users

Use this page to add users to the system.

Users need to be added to the user database on the Content Server in order to log in. To add users enter one user name per line, or user names separated by a semicolon (see examples on the next page).



More on **Adding Users** can be found on the next page.

The User Manager Settings when Add Users Has Been Selected

Add Users

[Add Users](#) [Return](#)

Add Administrators

Local Format
Users: MACHINENAMEUser.nameDisplay Name (optional)

Domain Format
Users: DOMAINNAMEUser.nameDisplay Name (optional)
Groups: @group.name

LDAP Format
Users: user.nameDisplay Name (optional)
Groups: @group.name

Add Owners

Local Format
Users: MACHINENAMEUser.nameDisplay Name (optional)

Domain Format
Users: DOMAINNAMEUser.nameDisplay Name (optional)
Groups: @group.name

LDAP Format
Users: user.nameDisplay Name (optional)
Groups: @group.name

Add Users

Local Format
Users: MACHINENAMEUser.nameDisplay Name (optional)

Domain Format
Users: DOMAINNAMEUser.nameDisplay Name (optional)
Groups: @group.name

LDAP Format
Users: user.nameDisplay Name (optional)
Groups: @group.name

[Add Users](#) [Return](#)

To ensure users have the right privileges, enter user names in the correct text field:

- Users entered in the **Add Administrators** text field will have administrative privileges.
- Users entered in the **Add Owners** text field will be able to make calls from the Content Server interface, edit personal recording aliases that they own and edit conferences they have recorded with a recording alias which gives them editor privileges.
- Users entered in the **Add Users** text field will be able to view conferences they have access to (these users will only see the **View Conferences** menu).

Click here to return to the **User Management Main Page** undoing any changes made.

Click here to add users to the database after you have entered the new users.



User names are not checked when they are entered on this page—you need to ensure that user details are correct, otherwise users will not be able to log in!

Adding Users Under Local Authentication

If **Local authentication** is selected in **Site Settings**, local users can log in to the Content Server.

Firstly, you need to ensure that local user accounts have been created on the Content Server. You can create local user accounts from the Windows Server administration site in the **Administrator Settings** menu.

These users then need to be added to the Content Server database by entering their usernames on the **Add Users** page. Please note that adding local groups is not supported.

Local usernames must be entered in this format:

MACHINENAME\user.name:Display Name(optional)

Adding Users Correctly

Users need to be added to the user database on the Content Server in order to log in. To add users, enter one user name per line, or user names separated by a semicolon.

Adding Users Manually

LDAP/Active Directory users need to be added manually through the **Add Users** page before they can log in if:

- **Domain** or **LDAP authentication** is selected in **Site Settings**,
and
- **Allow Guest Access** is selected in **Site Settings**.

Adding users under Domain authentication:

- Users must be entered in this format:
DOMAINNAME\user.name or DOMAINNAME\user.name:Display name

Adding users under LDAP authentication:

- Users must be entered in this format: user.name or user.name:Display name

Adding Groups

Groups always need to be added manually through the **Add Users** page.

LDAP/Active Directory groups must be entered in this format:

@group.name

Please note that although a group is added in this format, **@group.name**, both the group name and its base **DN** are displayed in the **User Management** page.

When adding a group, all members of that group will be automatically added to the Content Server on login with the privileges you assigned to the group, if **Domain** or **LDAP authentication** is selected in **Site Settings**, and regardless of whether or not **Allow Guest**

Access is selected in **Site Settings**.

If you add a group with **Owner** privileges, as members of that group log in to the Content Server, their accounts will be automatically created. The **User Role** next to their user name in the **User Management** page will appear to be **User**, but they will have **Owner** privileges inherited from their group membership.

If you want all members of the group to be **Users** or **Owners**, but some members of the group need administrative privileges, you can change the **User Role** for these members to **Admin**. The highest user role will be applied.

Adding Users Automatically

All users with valid accounts on the Domain or LDAP server will be added automatically upon login if:

- **Domain** or **LDAP authentication** is selected in **Site Settings**
and
- **Allow Guest Access** is deselected in **Site Settings**.

Users added automatically will only have privileges to view conferences they are authorized to view (their user role will be **User**). Administrators can give users special privileges by changing their role to **Owner** or **Administrator**.

Adding Users or Groups Under Domain or LDAP Authentication

When **Domain** or **LDAP authentication** is selected in **Site Settings**, LDAP/Active Directory users or groups can log in to the Content Server.

About Template Editing

The contents of a template determine how a videoconference is streamed/recorded by the TANDBERG Content Server.

The Content Server comes with a number of pre-defined templates that have no select box and so cannot be deleted. They can be edited and saved as new templates. They are described in detail on page 51.

Templates that are used in a recording alias cannot be deleted. They are identifiable because their check box is greyed out.

Administrator created templates can be edited, changed and saved or saved as a new template.



Options to think about for using existing, or creating new templates to produce the output required:

- What codecs or combinations of codecs are needed? Windows Media, Real Media or QuickTime?
- Is the conference needed to be streamed live or on demand or both?
- What sizes are needed for the outputs: audio, small, medium or large?
- Will there be any outputs for playback in portable devices?
- What layout do you want for playback in the viewer or for the portable device?

According to what answers are given to the above options, a recording/streaming template can be chosen from one of the existing system templates, one of the system templates can be saved as a new template, or a new template can be created.

The Template Editor Settings

The screenshot shows the 'TANDBERG Content Server' interface with the 'Administrator Settings' tab selected. Under the 'Templates' heading, there is a table with columns for a checkbox and a 'Name' column. The table lists several templates, including 'Small Windows Media PoP Live and On Demand' and 'Windows Media PoP Live and On Demand'. Below the table are buttons for 'Delete Selected' and 'Add Template'. Arrows from the text on the right point to the checkboxes and the 'Delete Selected' button.

There may be too many templates to be displayed on a single page given the preset number of templates displayed per page. Go to the other pages here. Check your [Preferences](#) to change the number of displayed **Items Per Page**.

Select templates to be deleted. Use the check-box above the column to select non-predefined templates. Predefined system templates cannot be deleted from the interface. Templates that are used in recording aliases cannot be selected or deleted from the list.

Click on the **Add Template** button to create a new template.

Click here to delete the templates selected.



Any template can be edited and then saved with changes or saved as a new template. Templates that are being used in a call can also be edited for the next call.

Editing Templates

About System Templates

A number of System Templates are available with S3 (which is the TANDBERG Content Server version described in this document). System templates cannot be changed but they can be edited and then saved as a new template.

The Template Editor

The screenshot shows the Template Editor interface. At the top, there is a list of templates with 'Edit' links: 'Windows Media PoP Live and On Demand', 'Windows Media PoP Live and On Demand with Portable Device Download', 'Windows Media PoP On Demand Only', 'Windows Media Single Live and On Demand', and 'Windows Media Single On Demand Only'. Below this is the 'Template Editor' form. It has a 'Save As' button and a 'Return' button. The 'Template' section has a 'Name' field with the value 'Windows Media Single Live and On Demand'. There are three checkboxes: 'Create movies for the Content Viewer' (checked), 'Create movies for portable devices' (unchecked), and 'Create movies for download' (unchecked). The 'Viewer' section has a description: 'settings for movies available live or on demand through the Content Viewer'. The 'Output Layout' section shows four icons: 'Main', 'Dual', 'Main / Dual', and 'Picture in picture'. The 'Movie Settings' section has two dropdown menus: 'Formats (choose up to 3)' with options 'Windows Media', 'MPEG4 (QuickTime compatible)', and 'Real Media'; and 'Conference sizes (choose up to 2)' with options 'Audio Only', 'Small', 'Medium', and 'Large'. An orange arrow points from the 'Return' button to the list of templates.

If changes are made to the template and you want to keep it, enter a new name for the template and click the **Save As** button. The new name will initially be called “Copy of ...”. Enter a new name to reflect the changes in the template and save it.

Click **Cancel** to not save the changes.

The Template “Windows Media Single Live and On Demand” has been edited here to show this screen. Changes cannot be saved to these System Templates, but they can be saved as new Templates.

Clicking the **Return** button will take you back to view the list of templates.

The Template Section

Template

Name: Large Windows Media PoP Live and On Demand and Downloads

Output Viewing Options

- Create movies for the Content Viewer ☒
- Create movies for Portable Devices ☒
- Create movies for Download ☒

Name. The name of the edited template.

Output Viewing Options

- Movies to be displayed in the Content Viewer
- Movies to be created for Download to Portable Devices
- Movies to be created for download and playback on the User's computer

The Content Viewer (I)

Output Layout

Two Videos—creates a video for the Main source and one for the Dual Source (VCR, Document Camera etc) for viewing in the Viewer. If Dual is not activated during the call, then only the Main Video will be available for On Demand playback. A dual stream will be displayed for Live conferences whether it is turned on or not.

Joined—creates one video output consisting of the main source on the left and the dual to the right joined as one video file. Dual will be displayed as a poster when it is not activated.

Switching—creates one video output. The Main video is replaced by the Dual when Dual is activated, then replaced by Main when Dual is stopped.

Picture in picture—creates one video with main inserted into the Dual. When Dual is activated, the Main video will transition to the selected location, displaying the Dual video. On turning off Dual, the Main will transition to take up the entire video.

Movie Settings

Formats. There are three formats available.

- Windows Media for playback using Windows Media Player on a Personal Computer
- MPEG4 for playback using QuickTime on a Macintosh
- Real Media for playback using Real Media Player. Up to 3 formats can be chosen.



For more information and examples of layouts, see also [Presentation Window](#).

The Content Viewer (II)

Movie Settings

Conference Sizes. You can select up to two conference sizes. Your selection of conference sizes in the Template Editor should be based on the end-user's streaming environment and Internet connection.

Audio-only. If your users have a very poor quality Internet access, choose 'Audio-only'. The average bit rate for streaming the conference will be around 35 kbps. Audio from the Main source will be recorded and played back, and if Dual Video is activated during the call, it will be displayed as still images.

Small. If your users have 64k modem access, choose 'Small'. The average bit rate for streaming the conference will be around 51 kbps.

The resolution of the recorded video in the Switching layout will be up to 160x120 pixels (for QCIF, CIF, 2.5CIF and 4CIF calls) and 212x120 pixels (for w288p, w448p, w576p, 720p). In the Two Videos layout, Dual Video will be displayed as still images only.

Medium. If your users have broadband access to the Internet (around 500kbps), choose 'Medium'. The bit rate for streaming the conference will depend on the bandwidth of the call, but will be capped at 471 kbps. So, for example, a 128k call bandwidth will result in a 117kbps streaming bit rate for your conference, and a 384k call bandwidth will result in a 353kbps bit rate. All calls 512K and over will result in a 471kbps bit rate for your streaming conference.

The resolution of the recorded video will depend on the video format negotiated for the call as well as the call bandwidth, apart from QCIF calls, which will always get a 160x120 pixels resolution.

In the Switching layout, the resolution will be:

- 240x180 pixels for CIF, 2.5CIF and 4CIF calls made at or below 384k;
- 320x180 pixels for w288p, w448p, w576p, 720p calls made at or below 384k;
- 320x240 pixels for CIF, 2.5CIF and 4CIF calls made at or above 512k;
- 424x240 pixels for w288p, w448p, w576p, 720p calls made at or above 512k.

Movie Settings

Large. If your users have access to a high-speed LAN, choose 'Large'. Beware, the bit rate for streaming the conference will depend on the bandwidth of the call, and can be as high as 1.76Mbps for a 1920k call. Users on broadband connections which cannot support this streaming bit rate will get a very poor streaming experience, with video buffering, stopping and starting (stuttering). This format also takes the longest to transcode.

The resolution of the recorded video will depend on the video format negotiated for the call as well as the call bandwidth, apart from QCIF calls, which will always get a 160x120 pixels resolution, CIF calls, which get 352x264 pixels and w288p calls, which get 512x288 pixels.

In the Switching layout, the resolution will be:

- 480x360 pixels for 2.5CIF and 4CIF calls made at or below 768k;
- 640x360 pixels for w448p, w576p and 720p calls made at or below 768k;
- 576x448 pixels for 2.5CIF calls made at or above 1152k;
- 576x448 pixels for 2.5CIF calls made at or above 1152k;
- 768x448 pixels for w448p, w576p and 720p calls made at or above 1152k.



Large and **Medium** sizes have been designed to provide the optimum viewing experience based on adaptive algorithms which are dependent on the video format negotiated during the call and the bandwidth of the call. Higher quality inputs with a large amount of data will result in a high resolution and high streaming bit rate outputs—e.g. a Large size Windows Media Switching layout template used in a w576p call made at a bandwidth of 1920k will result in a 768x448 video streaming at a bit rate of 1.76 Mbps. Lower quality inputs with less data will result in lower resolution and lower bit rate outputs—e.g. the same Large size template used in a 384k 4CIF call will result in a 480x360 video streaming at 353 kbps.

The Content Viewer (III)

Movie Settings

On Demand Media Server Settings. Displays the default Media Servers for the selected Formats. Non selected formats will be greyed out.

Live Stream. Choose if the Conference is to be viewed Live. Select the Format and Size if more than one is selected in the Movie Settings. Only one live stream is available per conference – other formats and sizes you selected in the template will be transcoded after the conference has finished.

The screenshot shows the 'Content Viewer' configuration window. It has several sections: 'Output Layout' with radio buttons for 'Two videos', 'Joined', 'Switching', and 'Picture in picture'; 'Movie Settings' with a list of formats (Windows Media, MPEG4, Real Media) and a list of conference sizes (Audio only, Small, Medium, Large); 'On Demand Media Server Settings' with dropdown menus for each format; 'Live Stream' with a checkbox and dropdowns for Format and Size; and 'Live Media Server Settings' with a dropdown for the Media Server. Orange arrows point from the text boxes to specific elements: one from 'Movie Settings' to the format list, one from 'On Demand Media Server Settings' to the dropdowns, one from 'Live Stream' to the checkbox, and one from 'Live Media Server Settings' to the dropdown.

Live Media Server Settings. Select the correct Media Server from the list for Live Streaming. If only one is set up, this will be selected. If none are set up, the following error message will be displayed: *Your movie(s) will not be broadcasted live until you have a live enabled Media Server set up.*

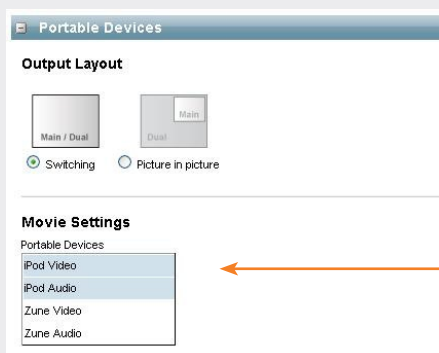
Retranscode realtime movies. If this is selected, the Live movies will be transcoded again after the Live Conference has completed. This can result in better quality viewing but will also add extra processing and load on the Content Server.

The Portable Devices Section

Output Layout

Switching—creates one video output. The Main video is replaced by the Dual when Dual is activated, then replaced by Main when Dual is stopped.

Picture in picture—creates one video stream with main picture inserted into the Dual. When Dual is activated, the Main video will transition to the selected location, displaying the Dual video. On turning off Dual, the Main will transition to take up the entire video. This layout can be restrictive when viewing on a small screen.



Movie Settings. Choose the outputs for your portable devices.

Options are:

- iPod Video
- iPod Audio
- Zune (Microsoft compatible) Video
- Zune Audio.

Once the Offline Transcoder has created the outputs, they will be available for Users from the Download link and icon on the Recorded Conference Listing page.

Users then copy the files to the correct folder for synchronizing with their Portable Device.

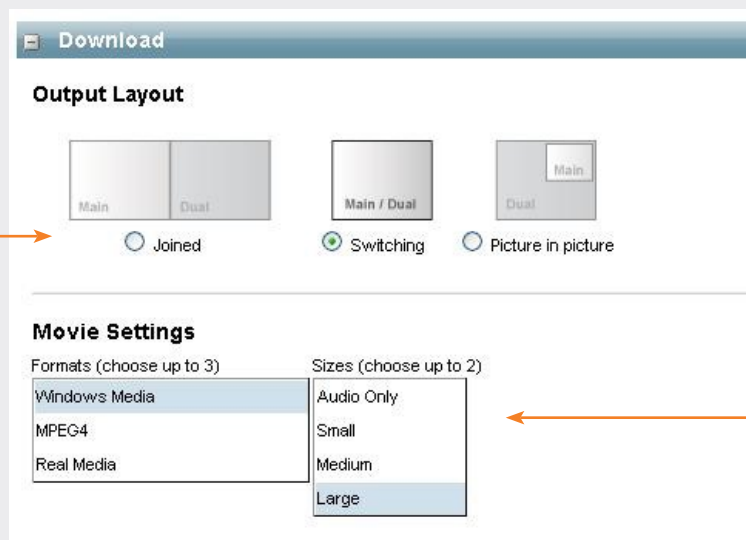
The Download Section

Output Layout

Joined—creates one video output consisting of the main source on the left and the dual to the right joined as one video file. Dual will be displayed as a poster when it is not activated.

Switching—creates one video output. The Main video is replaced by the Dual when Dual is activated, then replaced by Main when Dual is stopped.

Picture in picture—creates one video with main picture inserted into the Dual. When Dual is activated, the Main video will transition to the selected location, displaying the Dual video. On turning off Dual, the Main will transition to take up the entire video.



Movie Settings

Formats—there are three formats available. Windows Media for playback using Windows Media Player on a Personal Computer, MPEG4 for playback using QuickTime on a Macintosh and Real Media for playback using Real Media Player. Either 1, 2 or 3 formats can be chosen.

Conference Sizes—as files will be downloaded and viewed on a computer, the internet connection is not then an issue, other than the time it takes to download them. The advantage is for users with poor Internet connections as they can watch the files, once downloaded, without being connected to the Internet.

One or two sizes need to be selected to create an output to be viewed in the Player.

The Summary Section

Viewer Summary. Shows information about the outputs created by this template for the Viewer. Will display the Live format and size and up to two On Demand videos with format and size.

Portable Devices Summary. Shows information about the outputs created by this template for Portable Devices. Will display the format and size for iPod and Zune Video as well as audio formats chosen.

Download Summary. Shows information about the outputs created by this template for Download to a user's computer. Will display the Output layout, format and size for all the Downloads selected.



There is a maximum of 6 outputs per Template. If the limit is exceeded, a message like "This template has 7 outputs. The maximum number of outputs for a template is 6. You must remove 1 output before you can save this template. See Summary for more information." will be displayed and the template cannot be saved if there are more than 6 outputs, so some will have to be deleted.

| Summary | |
|--|----------------------------------|
| Viewer | |
| Live | - Two videos Windows Media Large |
| 1 - On Demand | - Two videos Windows Media Large |
| Portable Devices | |
| 2 - Download | - Switching iPod Video Optimal |
| 3 - Download | - Audio Only iPod Audio Optimal |
| Download | |
| 4 - Download | - Switching Windows Media Large |
| <input type="button" value="Save"/> <input type="button" value="Save As"/> <input type="button" value="Return"/> | |

The Template Editor

On Adding Templates, nothing is selected.

Enter the **Name** of the Template as meaningful as possible for the users who will be selecting Templates for their Personal Recording Aliases.

The Name does not need to detail the outputs that the Template will create as this information is displayed in the Recording Alias and Create Conference pages.

If none of the Create movies options are selected, the conference will be recorded to a file but no viewable outputs will initially be created. To create outputs from such a conference, Edit the Conference and choose the **Add Outputs** button. This allows an Editor to add viewable outputs to a completed conference that has been recorded.

To create outputs for this Template, choose one or more of the following options:

- Create movies for the Content Viewer
- Create movies for Portable Devices
- Create movies for Download

The select options as detailed in previous screens.

The screenshot shows the 'Template Editor' interface within the 'TANDBERG Content Server' application. At the top, there are navigation tabs: 'View Conferences', 'Conference Setup', and 'Administrator Settings'. The 'Template Editor' section has a 'Save' and 'Return' button. Below this is a 'Template' section with a 'Name' input field. Underneath is the 'Output Viewing Options' section, which includes three checkboxes: 'Create movies for the Content Viewer', 'Create movies for Portable Devices', and 'Create movies for Download'. Below these is a 'Summary' section with three expandable areas: 'Viewer' (showing 'No outputs'), 'Portable Devices' (showing 'No outputs'), and 'Download' (showing 'No outputs'). At the bottom of the summary section are 'Save' and 'Return' buttons.

About Templates

The table shown here lists the default Windows Media System Templates that come installed with the Content Server.

The System Templates Available

| Description | Recorded Output |
|--|--|
| Windows Media PoP Live and On Demand | Uses the Two Videos output consisting of a Main and a Dual. Conference size is Medium for both Live and On Demand. |
| Windows Media PoP Live and On Demand with Portable Device Download | Uses the Two Videos output consisting of a Main and a Dual. Conference size is Medium for both Live and On Demand. Also has downloadable Video outputs for Zune and iPod using the Switching Output. |
| Windows Media PoP On Demand Only | Uses the Two Videos output consisting of a Main and a Dual. Conference size is Medium for On Demand. No live output from this Template. |
| Windows Media Single Live and On Demand | Uses the Switching output. Displays Main but when Dual is switched on, Dual is displayed. Conference size is Medium for both Live and On Demand. |
| Windows Media Single On Demand Only | Uses the Switching output. Displays Main but when Dual is switched on, Dual is displayed. Conference size is Medium for On Demand viewing only. |

About Media Servers

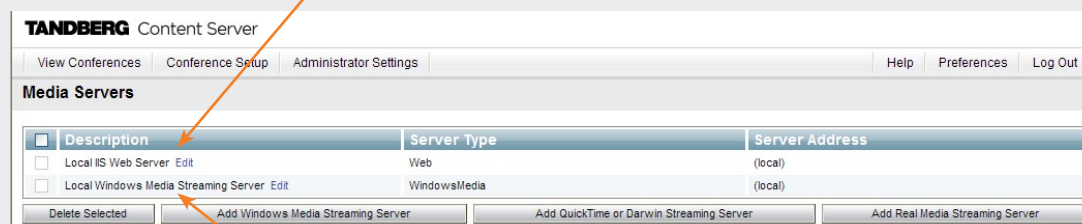
Use the **Media Servers** page to configure external streaming servers for live streaming and on demand playback of Windows Media, MPEG4 and Real Media.

External streaming servers configured here will be available when you create new templates or edit existing templates. You can also specify your configured servers to be the **default servers** for new templates in **Site Settings > System Defaults > Default Media Servers**

The TANDBERG Content Server comes with two preconfigured default media servers which cannot be edited or deleted:

- Local IIS Web Server
- Local Windows Media Streaming Server

The Media Servers Options



Local IIS Web Server. By default, this server is used to deliver MPEG4 and Real Media for on demand playback as a progressive download (HTTP or pseudo-streaming). It also delivers still images, if available. This server cannot be modified or deleted.

Local Windows Media Streaming Server. By default, this server is used for streaming Windows Media live and on demand. This server cannot be modified or deleted, but its properties can be edited and it can be saved as a new server.

Adding Windows Media Streaming Server

Configuring Windows Media Streaming Server

Click on the **Add Windows Media Streaming Server** (see also previous page) to create a new server for streaming Windows Media.

SERVER PUSH

Server push. Select this option if you want to push your live stream to the external Windows Media streaming server.

Port. Enter the port to be used with your external Windows Media streaming server. The default port if you are using the TCS's Windows Media streaming server is 8080.

PUBLISHING POINTS

Create new. Choose this option if you want the Content Server to create new publishing points on your external streaming server.

Create new using settings from existing. Choose this option if you want the Content Server to create new publishing points on your external streaming server, using the settings from existing publishing points. Enter the existing **Publishing Points** for your **Main** and **Dual** video streams (they can be the same in both fields).

Use existing. Choose this option if you have already set up publishing points on your external streaming server. Enter the existing **Publishing Points** for your **Main** and **Dual** video streams. There must be two different publishing points to stream one video stream off each.

LIVE URLS

Use default live URLs. Choose this option to use the default live URL for this media server.

Use alternate live URLs. Choose this option to supply your own URLs for live streaming. Enter the URLs for Main and Dual video streams and choose whether you wish the filename (in this case the publishing point name) to be appended to the alternate URL.

The Windows Media Streaming Server Options

The screenshot shows the configuration window for a Windows Media Streaming Server. It is divided into two main sections: 'Server Settings' and 'Live Streaming Settings'. In 'Server Settings', there are fields for 'Name', 'Server Address' (set to 'local'), and checkboxes for 'Support Live Streaming' (checked) and 'Support On Demand' (checked). In 'Live Streaming Settings', there is a 'Live Settings' section with fields for 'User Name', 'Password', and 'Password Confirm'. Below this is a 'Publishing Points' section with radio buttons for 'Server push', 'Create new', 'Create new using settings from existing', and 'Use existing'. There are also fields for 'Main' and 'Dual' publishing points. At the bottom is a 'Network pull port(s)' section with fields for 'Main' and 'Dual' ports. Finally, there is a 'Live URLs' section with radio buttons for 'Use default live URLs' and 'Use alternate live URLs', and fields for 'Main' and 'Dual' URLs with checkboxes to 'Append filename to URL'.

SERVER SETTINGS

Name. Enter a descriptive name for the server. The server name will be used in a template when selecting a media server.

Server Address. Enter the DNS name or the IP address of the server. Use (local) if it is on this TANDBERG Content Server.

Support Live Streaming. Select if the server is to support live streaming. If not selected, you will not be able to select this media server in the Advanced options for live streaming.

Support On Demand. Select if the server is to support on demand streaming. If not selected, you will not be able to select this media server in the Advanced options for on demand streaming.

LIVE SETTINGS

User Name. Enter the user name to be used for authentication with your streaming server.

Password. Enter the password to be used for authentication with your streaming server.

Password Confirm. Enter the password again to confirm.

Network pull port(s). Select this option if you want the external server to request the stream. A network publishing point must be created on the external Windows Media streaming server to use this functionality. Enter the ports for network pull of **Main** and **Dual** video streams—select ports that are NOT being used by the Content Server (see the Appendix for a list of ports used by the Content Server).

Adding Windows Media Streaming Server *cont...*

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The On Demand Settings Options

MEDIA LOCATION

Write movies to the default media location.

Select this option if you want your media to be written to the TCS's default media location (you can check the default media storage location in the Server Maintenance page). The default media location for Windows Media files is (media location)\data\media.

Write movies to an alternate location. Choose this option if you want to write the media to an external streaming server using a shared drive or UNC path. Enter the shared drive or UNC path, e.g. //servername in the **Alternate path** field.

FTP movies to location. Choose this option to FTP the media files to the external streaming server once the call has ended.

Server Address. Enter the IP address or DNS name of the FTP server.

Port. Enter the port number of the FTP service. Most FTP servers will use port 21.

Directory. Enter the directory relative to the root FTP directory on the FTP server. Leave this blank to upload to the root FTP directory. The directory should be specified using forward slashes like in a URL, e.g. /movies/.

User Name. Enter the username to be used for authentication with the FTP server.

Password. Enter the password to be used for authentication with the FTP server.

Password Confirm. Enter the password again to confirm.

The screenshot shows the 'On Demand Settings' dialog box. It has two main sections: 'Media location' and 'On Demand URLs'. In the 'Media location' section, the 'Write movies to the default media location' option is selected. In the 'On Demand URLs' section, the 'Use default on demand URLs' option is selected. Orange arrows point from the text instructions on the left to the corresponding fields and options in the dialog box: 'Write movies to the default media location', 'Write movies to an alternate location', 'FTP movies to location', 'Server Address', 'Port', 'Directory', 'User Name', 'Password', 'Password Confirm', 'Use default on demand URLs', 'Use alternate on demand URLs', 'Main', 'Dual', 'Append filename to URL' (for both Main and Dual), 'Save', and 'Return'.

ON DEMAND URLs

Use default on demand URLs. Choose this option to use the default on demand URL for this media server.

Use alternate on demand URLs. Choose this option to supply your own URLs for on demand streaming. Enter the URLs for **Main** and **Dual** video streams and choose whether you wish the filename to be appended to the alternate URL.

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Setting up Multicast Delivery

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Prerequisites

Before you can start delivering your live content as a multicast stream you need to check that:

- Your network is multicast-enabled.
- The IP address under Destination multicast IP address and port is correct and modify it if necessary.
- You have configured a multicast delivery server.

Basic Setup—It Only Needs to Be Done Once

1 Verify the IP address under **Destination multicast IP address**.

2 Remote Desktop into your Content Server and choose **Manage Your Server** from the **Start Menu**.

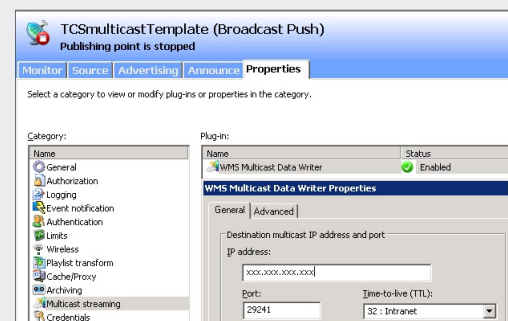
3 Click on **Manage this streaming media server**.

4 Expand the list next to the name of your streaming media server, then expand the list of **Publishing Points**.

5 Select the **TCSmulticastTemplate Publishing Point** and click on the **Properties** tab.

6 Select **Category Multicast streaming**.

7 Right-click on **WMS Multicast Data Writer** and select **Properties** from the drop-down menu. Verify that the **IP address** under **Destination multicast IP address and port** is correct and modify it if necessary.



Please note that the Content Server will use the first two octets of the IP address, but it will dynamically assign the last two octets, eg. if an IP address like 10.0.1.1 is specified, TCS may use any addresses in the 10.0 range for multicast streaming. If all your multicast streams originate from a Content Server, you may pick an IP range when you set up your multicast network, and tie it to the TCS.

- 8** Configure a multicast delivery server:
- Go to **Administrator Settings > Media Servers** to add a Windows Media Streaming Server and configure it as follows:
- Enter a descriptive name for the server
 - Enter '(local)' in the Address field
 - Select **Support Live Streaming**
 - Select **Server push**
 - Enter **8080** in the Port field
 - **Publishing Points:** Select **Create new using settings from existing** and enter **TCSmulticastTemplate** in the **Main** and **Dual** fields
 - Live URLs:
 - Select **Use alternate live URLs** and enter **http://(local)/tcs/data** in the **Main** and **Dual** fields.
 - Select the checkboxes to have file names appended to the URL

- 9** Once you have successfully completed the basic setup, you can use the multicast delivery server you have configured and select it in the **Live Media Server Settings** section of your templates.

Movie Settings

Formats (choose up to 3):
☒ Windows Media
☐ MPEG4
☐ Real Media

Conference sizes (choose up to 2):
☐ Audio only
☐ Small
☒ Medium
☐ Large

On Demand Media Server Settings Please select the Media Servers that will serve the following formats on demand

Windows Media:
 MPEG4:
 Real Media:

☒ **Live Stream**

Format:
 Size:
 Retranscode realtime movies: ☐

Live Media Server Settings Please select the Media Server that will serve the following format live

Media Server:

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Adding QuickTime or Darwin Streaming Server

Configuring QuickTime Server

Click on the [Add QuickTime or Darwin Streaming Server](#) (see also three pages back) to configure an external server for streaming MPEG4 media.

LIVE STREAMING SETTINGS

Streaming port range start. Specify the start port for your streaming port range, e.g. 30000. The start port should be an even number. The Content Server will use the streaming start port + 30 to be used for streaming live calls, eg. a port range from 30000 to 30030. Ensure that you select ports that are NOT being used by the Content Server (see the Appendix for a list of ports used by the Content Server).

User Name. Enter the user name to be used for authentication with your streaming server.

Password. Enter the password to be used for authentication with your streaming server.

Password Confirm. Enter the password again to confirm.

LIVE URLS

Use default live URLs. Choose this option to use the default live URL for this media server.

Use alternate live URLs. Choose this option to supply your own URLs for live streaming. Enter the URLs for **Main** and **Dual** video streams and choose whether you wish the filename (in this case the sdp filename) to be appended to the alternate URL.

The QuickTime Or Darwin Streaming Settings Options

Media Server: QuickTime or Darwin Streaming Server

Save Return

Server Settings

Name *

Server Address *

Support Live Streaming ☒

Support On Demand ☒

Live Streaming Settings

Live Settings

Streaming port range start

User Name

Password

Password Confirm

Live URLs

☒ Use default live URLs

☐ Use alternate live URLs

Main ☐ Append filename to URL

Dual ☐ Append filename to URL

SERVER SETTINGS

Name. Enter a descriptive name for the server. The server name will be used in a template when selecting a media server.

Server Address. Enter the DNS name or the IP address of the server.

Support Live Streaming. Select if the server is to support live streaming. If not selected, you will not be able to select this media server in the Advanced options for live streaming.

Support On Demand. Select if the server is to support on demand streaming. If not selected, you will not be able to select this media server in the Advanced options for on demand streaming.

The On Demand Settings Options

MEDIA LOCATION

Write movies to the default media location.

Select this option if you want your media to be written to the TCS's default media location (you can check the default media storage location in the Server Maintenance page). The default media location for MPEG4 files is (media location)\data\www.

Write movies to an alternate location. Choose this option if you want to write the media to an external streaming server using a shared drive or UNC path. Enter the shared drive or UNC path, e.g. //servername in the Alternate path field.

FTP movies to location. Choose this option to FTP the media files to the external streaming server once the call has ended.

Server Address. Enter the IP address or DNS name of the FTP server.

Port. Enter the port number of the FTP service. Most FTP servers will use port 21.

Directory. Enter the directory relative to the root FTP directory on the FTP server. Leave this blank to upload to the root FTP directory. The directory should be specified using forward slashes like in a URL, e.g. /movies/.

User Name. Enter the username to be used for authentication with the FTP server.

Password. Enter the password to be used for authentication with the FTP server.

Password Confirm. Enter the password again to confirm.

The screenshot shows the 'On Demand Settings' dialog box. It has two main sections: 'Media location' and 'On Demand URLs'. In the 'Media location' section, the 'Write movies to the default media location' option is selected. Below it are fields for 'Alternate path', 'Server Address', 'Port', 'Directory', 'User Name', 'Password', and 'Password Confirm'. In the 'On Demand URLs' section, the 'Use default on demand URLs' option is selected. Below it are fields for 'Main' and 'Dual' URLs, each with a checkbox for 'Append filename to URL'. Orange arrows point from the text descriptions on the left to the corresponding fields and options in the dialog box.

ON DEMAND URLs

Use default on demand URLs. Choose this option to use the default on demand URL for this media server.

Use alternate on demand URLs. Choose this option to supply your own URLs for on demand streaming. Enter the URLs for **Main** and **Dual** video streams and choose whether you wish the filename to be appended to the alternate URL.

Adding Real Media Streaming Server

Configuring Real Media Server

Click on the **Add Real Media Streaming Server** (see also five pages back) to configure an external server for streaming Real Media.

SERVER SETTINGS

Name. Enter a descriptive name for the server. The server name will be used in a template when selecting a media server.

Server Address. Enter the DNS name or the IP address of the server.

Support Live Streaming. Select if the server is to support live streaming. If not selected, you will not be able to select this media server in the Advanced options for live streaming.

Support On Demand. Select if the server is to support on demand streaming. If not selected, you will not be able to select this media server in the Advanced options for on demand streaming.

LIVE URLS

Use default live URLs. Choose this option to use the default live URL for this media server.

Use alternate live URLs. Choose this option to supply your own URLs for live streaming. Enter the URLs for Main and Dual video streams and choose whether you wish the filename to be appended to the alternate URL.

The Real Media Streaming Settings Options

Media Server: Helix Streaming Server

Save Return

Server Settings

Name

Server Address

Support Live Streaming ☒

Support On Demand ☒

Live Streaming Settings

Live Settings

Server Type

Port

Broadcast Point

User Name

Password

Password Confirm

Live URLs

☒ Use default live URLs

☐ Use alternate live URLs

Main ☐ Append filename to URL

Dual ☐ Append filename to URL

LIVE STREAMING SETTINGS

Server Type. Select either Server G2 or Server 90.

Port. Enter the port to be used for live streaming off your Real Media server.

Broadcast Point. Enter the broadcast point for the server. If you have not manually changed it on your external server, the broadcast mount point for Server G2 is "encoder", and for Server 90, "broadcast".

User Name. Enter the user name to be used for authentication with your streaming server.

Password. Enter the password to be used for authentication with your streaming server.

Password Confirm. Enter the password again to confirm.

The On Demand Settings Options

MEDIA LOCATION

Write movies to the default media location.

Select this option if you want your media to be written to the TCS's default media location (you can check the default media storage location in the Server Maintenance page). The default media location for Real Media files is (media location)\data\www.

Write movies to an alternate location. Choose this option if you want to write the media to an external streaming server using a shared drive or UNC path. Enter the shared drive or UNC path, e.g. //servername in the Alternate path field.

FTP movies to location. Choose this option to FTP the media files to the external streaming server once the call has ended.

Server Address. Enter the IP address or DNS name of the FTP server.

Port. Enter the port number of the FTP service. Most FTP servers will use port 21.

Directory. Enter the directory relative to the root FTP directory on the FTP server. Leave this blank to upload to the root FTP directory. The directory should be specified using forward slashes like in a URL, e.g. /movies/.

User Name. Enter the username to be used for authentication with the FTP server.

Password. Enter the password to be used for authentication with the FTP server.

Password Confirm. Enter the password again to confirm.

The screenshot shows the 'On Demand Settings' dialog box. It has two main sections: 'Media location' and 'On Demand URLs'. In the 'Media location' section, the 'Write movies to the default media location' option is selected. In the 'On Demand URLs' section, the 'Use default on demand URLs' option is selected. Orange arrows point from the text instructions on the left to the corresponding fields and options in the dialog box: 'Write movies to the default media location', 'Alternate path', 'Server Address', 'Port', 'Directory', 'User Name', 'Password', 'Password Confirm', 'Use default on demand URLs', 'Broadcast Point', 'Main', 'Dual', 'Append filename to URL' (for both Main and Dual), 'Save', and 'Return'.

ON DEMAND URLs

Use default on demand URLs. Choose this option to use the default on demand URL for this media server. Enter the Broadcast Point for the streaming server.

Use alternate on demand URLs. Use alternate on demand URLs: Choose this option to supply your own URLs for on demand streaming. Enter the URLs for **Main** and **Dual** video streams and choose whether you wish the filename to be appended to the alternate URL.

About Call Configuration

The **Call Configurations** enables the Administrator to set up different configurations for calls that can be attached to **Recording Aliases**.

The Call Configuration Editor Settings

Call Configurations

| <input type="checkbox"/> | Name | |
|---------------------------------|---------------------------|---------------------------------|
| <input type="checkbox"/> | 60 Minute Call | Edit |
| <input type="checkbox"/> | System Call Configuration | Edit |
| Delete Selected | | Add Call Config |

The **System Call Configuration** cannot be deleted. It can be edited and then saved as a new **Call Configuration**. It has all options selected and is used in the installed **Recording Aliases**, **OnDemand only** and **Default Live and OnDemand**. **Call Configuration** are used in all **Recording Aliases** in the system.

User-created call configurations cannot be deleted if they are being used in a **Recording Alias**.

Editing, Duplicating or Creating a New Call Configuration

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About Editing

This is very similar to the template editing described in the articles on [Template Editor](#).

System call configuration cannot be altered— instead it can be edited and saved under a new name to allow changes to be made.

Non-system call configurations, however, may be edited.

The **Call Configuration Editor Page** is shown here as it looks when the **Add Call Config** button has been clicked (see previous page for more on this).

Support Encryption. Select to allow calls using this call configuration to use encryption.

Advertised Codecs. The TANDBERG Content Server supports advertising of video and audio codecs as part of the capability set negotiation.

Video Algorithm. The administrator can enable advertising of video codecs for each call configuration by selecting the checkbox. Supported advertised codecs include H.261, H.263 and H.264.

Audio Algorithm. The administrator can enable advertising of audio codecs for each call configuration by selecting the checkbox. Supported advertised codecs include G.711, G.722 and G.722.1.

The Call Configuration Editor Settings

Edit Call Configuration

Save Save As Return

Call Configuration

Name 60 Minute Call

H.239 Capabilities

H.239 Enabled ☒

Supported Resolutions ☒ VGA (640 x 480) ☒ SVGA (800 x 600) ☒ XGA (1024 x 768)

Call Options

Supported Call Speeds (kbps) ☒ 128 ☒ 192 ☒ 256 ☒ 384 ☒ 512 ☒ 768 ☐ 1024 ☐ 1280 ☐ 1536 ☐ 1920 ☐ 2048

Maximum Call Length (minutes) 60

Support Encryption ☒

Advertised Codecs

Video Algorithm ☒ H.261 ☒ H.263 ☐ H.264

Audio Algorithm ☒ G.711 ☒ G.722 ☒ G.722.1

Save Save As Return

Name. Use the **Name** field to provide a short description of your call configuration file.

H.239 Capabilities Enabled. H.239 capabilities are enabled by default. If **H.239 Dual Video output** is not required, this capability can be disabled.

Supported Resolutions. Administrators can select the resolutions for acceptable H.239 video input. For optimal performance, it is recommended that the maximum resolution be set to 800×600 or 640×480.

Call Options. The supported call speeds and maximum time in call can be set for call configuration.

Supported call speeds (kbps). The administrator can select the supported call speeds for calls from a range of options from 128 to 2048 kbps. This determines the range of available conference bandwidths when a user dials out from the TANDBERG Content Server.

Maximum time in call (mins). This feature will automatically end both incoming and outgoing calls when the call time exceeds the length of time specified in minutes. The default setting in the **Full Call Configuration** template is 0, which means that the call will never be automatically ended. The default value for new call configurations is 0.

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About Categories


A conference can be assigned a **Category** to make searching for conferences quicker for the user. **Personal Recording Aliases** can be assigned a category so that any conference created using the alias inherits the category.

There are six categories that come with the Content Server installation, **Announcement**, **Education**, **General**, **Meetings**, **News** and **Training**. Each category contains a name and a description.

Administrators can edit existing categories, delete categories that are not needed, by clicking the **Categories select** box and then the **Delete Selected** button and add new categories to the installation.

Click the **Add Category** button to add a new category and description.

If a category is deleted, all conferences that were assigned that category will then have no category assigned to them.

 There is no limit on the number of Categories that can be entered.

The Category Settings

Categories

| <input type="checkbox"/> | Category Name | Category Description |
|---------------------------------|------------------------------------|------------------------------|
| <input type="checkbox"/> | Announcements Edit | |
| <input type="checkbox"/> | Education Edit | |
| <input type="checkbox"/> | General Edit | |
| <input type="checkbox"/> | Meetings Edit | |
| <input type="checkbox"/> | News Edit | |
| <input type="checkbox"/> | Training Edit | |
| Delete Selected | | Add Category |

Add Category

Category Details

Category Name

Category Description

[Save](#) [Return](#)

About Server Logs

The server logs from the **Content Engine**, **Content Library** and **Transcode Engine** are available from this menu item.

- The **Content Engine** logs will be displayed by default.
- To view a log, click on name of the log file and you will be prompted to open it with your favorite editor or save it to disk.
- The administrator can navigate through the log files and delete old log files from the interface.
- The current log for the TANDBERG Content Server is displayed first and cannot be deleted.
- A new log will be created every time the Content Server service restarts. A new log will also start if the current log exceeds 10MB.

The Server Logs Page

Server Logs

Content Engine 1 2 3 4 5 6 7 8 9 >

| <input type="checkbox"/> | File Name | Modified Date | File Size (bytes) |
|--------------------------|--------------------|---------------------------|-------------------|
| <input type="checkbox"/> | TCS07101901-00.log | October 19 2007 14:14:44. | 13991 |
| <input type="checkbox"/> | TCS07101802-00.log | October 19 2007 12:15:22. | 31054 |
| <input type="checkbox"/> | TCS07101801-00.log | October 18 2007 11:37:01. | 23846 |
| <input type="checkbox"/> | TCS07101703-00.log | October 17 2007 15:25:58. | 509 |
| <input type="checkbox"/> | TCS07101702-00.log | October 17 2007 15:25:53. | 30530 |

Delete Selected

The Content Library Logs Page

Server Logs

Content Library

| <input type="checkbox"/> | File Name | Modified Date | File Size (bytes) |
|--------------------------|-----------------------|----------------------------|-------------------|
| <input type="checkbox"/> | phperror_071030_0.log | October 30 2007 10:04:49. | 1320 |
| <input type="checkbox"/> | phperror.log | December 04 2007 03:40:38. | 28306 |

Delete Selected

Roll Log File

Server Logs

Transcode Engine 1 2 3 4 5 6 7 8 9 10 > Next 10

| <input type="checkbox"/> | File Name | Modified Date | File Size (bytes) |
|--------------------------|-------------------|---------------------------|-------------------|
| <input type="checkbox"/> | OT07101802-00.log | October 19 2007 14:15:06. | 26229 |
| <input type="checkbox"/> | OT07101801-00.log | October 18 2007 11:52:28. | 12000 |
| <input type="checkbox"/> | OT07101702-00.log | October 18 2007 10:04:23. | 19499 |
| <input type="checkbox"/> | OT07101701-00.log | October 17 2007 12:59:12. | 1171 |
| <input type="checkbox"/> | OT07101502-00.log | October 17 2007 12:10:19. | 89743 |

Delete Selected

Select the **Content Library** and **Transcode Engine** logs from the drop down menu item.

The **phperror logs** are displayed and viewed from here. The logs can be rolled over if they are becoming unmanageable. Old logs can also be deleted.

The **phperror.log** will roll once it reaches approximately 5MB.

About Server Maintenance

This page allows administrators to view the following information:

- Software Information
- Disk Space
- Media Storage Location
- Upgrade Software

The Server Maintenance Page

Server Maintenance

[Return](#)

Software Information

Software Version: TANDBERG Content Server v3.0
 Device Serial Number:
 Installed Option Keys: 115361R5-1-22B0B45B - 5 Recorded Calls
 115361L2-1-ED79A533 - 2 Live Broadcast

Server Disk Space

| Path | Total Disk Space | Free Disk Space | Percentage Free |
|------|------------------|-----------------|-----------------|
| C: | 15 GB | 9 GB | 59% |
| E: | 204 GB | 203 GB | 99% |

Media Storage Location

To change the current media storage location, log in to the TANDBERG Content Server via remote desktop and run the TCS NAS Wizard.
 Media Storage Location: E:

Upgrade Software – this section is for upgrading your current software options

Add Option Key: [Add Option Key](#)
 Restart Service: [Restart Service](#)
[Return](#)

Software information. The installed software version and build number, serial number, and option keys installed on the TANDBERG Content Server.

Disk Space. The total available disk space, free disk space and the percentage of free space left on disks. The disks for which this information is available include C:/ and the disk or disks which are used as the media location (E:/, if the default media storage location is on the local drive, and an additional disk if the media location is a NAS).

The Media Storage Location. This section is described in detail in the following pages.

Upgrade Software. The Content Server software can easily be upgraded by adding option keys provided by authorized TANDBERG resellers or partners. After putting in the option key click on the Restart Service button to restart the Content Server for the installed option key to take effect.

About Media Storage Location

The default location for your media files is drive E: on your TANDBERG Content Server. You may change this location to store files on a NAS by using the TCS NAS Wizard.

The NAS Wizard gives you the ability to store your media in an external location, which means that your recording capacity will not be limited by the disk storage on the Content Server.

Your media will be recorded to a temporary directory on the Content Server first, and then automatically moved to the NAS. Your conferences will be streamed from the NAS using the Content Server's streaming media server or another external streaming media server that you specify.

We recommend Network Attached Storage (NAS) devices which are built on the Windows Storage server and are Windows Hardware Quality Lab certified. The file sharing protocol used by the Content Server to the NAS is Microsoft SMB.

Before You Start

Before you start, make sure that:

- The Content Server is added to same domain as the NAS (see the section on Authentication for details on adding the Content Server to a domain).
- Choose or create an account in the domain under which IIS will run. This domain account needs to have both administrative rights on the Content Server and permissions over the NAS share.

The Media Storage Location

Server Maintenance

[Return](#)

[Software Information](#)

[Server Disk Space](#)

[Media Storage Location](#)

To change the current media storage location, log in to the TANDBERG Content Server via remote desktop and run the TCS NAS Wizard.

Media Storage Location E:

[Upgrade Software](#) – this section is for upgrading your current software options

[Return](#)

Configuring NAS

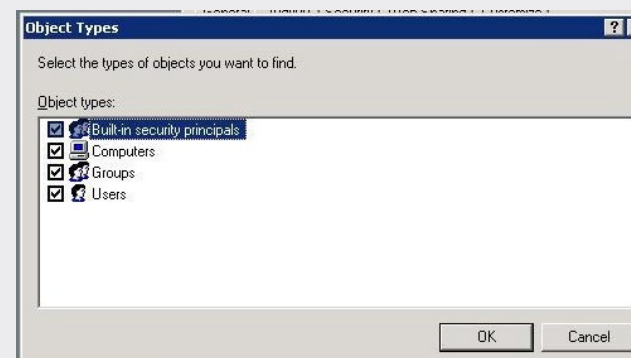
1

- Make sure that your Content Server is on the same domain as the NAS
- Remote desktop into your NAS
- Set up a share with a folder inside it.

2

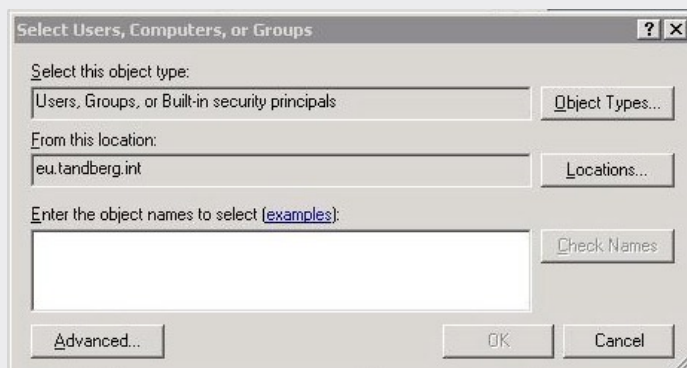
Set permissions and security settings on the share to allow the Content Server full control over the share:

- Right-click on the share and select **Sharing and Security...**
- Click on **Permissions**
- Click **Add**
- Click **Object Types**.



3

Select the Checkbox for Type – **Computers**.



Enter **<Content Server Server Name>** (as registered in the domain). If you have not set a new server name through the **Windows Administration** site, the default Content Server name is **TANDBERG-####**.

4

Click on **Check Names** and click **OK**.
Give User **<Content Server Server Name>** full control over the share.

5

Click on the **Security** tab.
Repeat steps 2–4 to give the Content Server full control of the folder under the **Security Settings** tab.

6

Click **Set permissions and security settings** on the share to allow the domain account performing the move full control over the share.
Repeat steps 2–5, but without checking **Computers** as the **Object Type**.

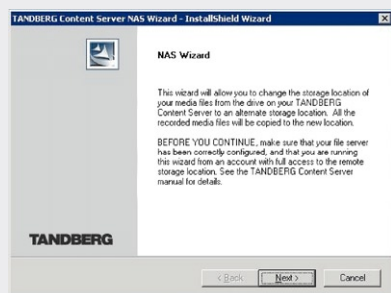
Changing the Default Media Location to Alternate Storage Location

- Before you start, log in as the default administrator to the Content Server via Remote Desktop and add the domain account with permissions over the NAS share to the local administrators' group. Log out.

- Log back in via Remote Desktop to the Content Server using the domain account which you have set up in 1, which has been used to change the media location to the NAS.

- Go to **Start Menu > All Programs > TANDBERG > TCS > TCS NAS Wizard**, or double-click the **TCS NAS Wizard** shortcut on the desktop.

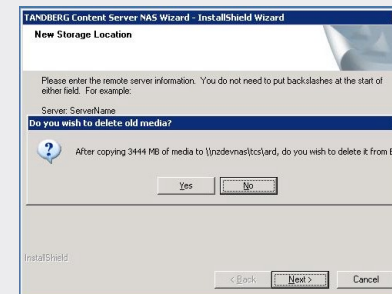
- Click on **Next** to start the NAS Wizard.



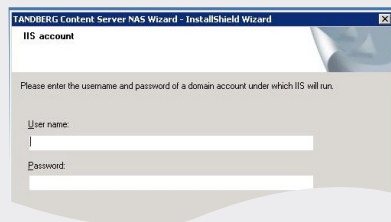
- Enter the new storage location information:
 - ServerName
 - ShareName\FolderName.



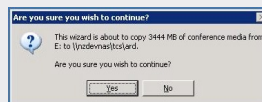
- At the **Do you wish to delete old media?** prompt:
 - Click **Yes**, if you want to copy the media files to the new storage location and delete them from the current storage location.
 - Click **No** if you want to copy the media files across without deleting them from the current storage location.



- At the **IIS Account** prompt, enter the username (in the format DOMAIN\username) and password of the domain account under which IIS will run. This account needs to have both administrative rights on the Content Server and permissions over the NAS share.



- At the **Are you sure you wish to continue?** prompt, click on **Yes**. Depending on the amount of data, the transfer may take several minutes.



- Click on **Finish** to exit the NAS Wizard.



Changing Back From the Alternate Storage Location to the Default Media Storage Location

- 1 Log in via Remote Desktop to the Content Server using the domain account which has both administrative rights on the Content Server and permissions over the NAS share.

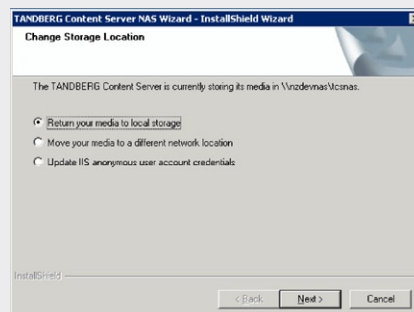
- 2 Go to **Start Menu > All Programs > TANDBERG > TCS > TCS NAS Wizard**, or double-click the **TCS NAS Wizard** shortcut on the desktop.

- 3 This will produce the NAS Wizard.

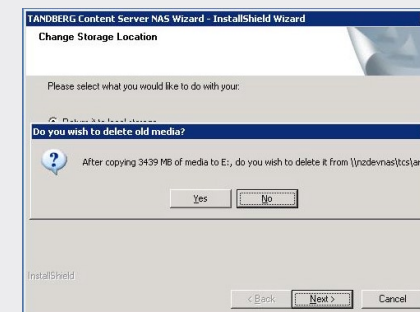
- 4 Click on **Next** to start the NAS Wizard.



- 5 At the **Change Storage Location** prompt, select **Return it to local storage** (if you select **Move it** to a different network location, follow the steps as outlined on the previous page).



- 6 At the **Do you wish to delete old media?** prompt:
 - Click **Yes**, if you want to copy the media files to the new storage location and delete them from the current storage location.
 - Click **No** if you want to copy the media files across without deleting them from the current storage location.



- 7 At the **Are you sure you wish to continue** prompt, click on **Yes**. Depending on the amount of data, the transfer may take several minutes.



- 8 Click on **Finish** to exit the NAS Wizard. Your media files have been transferred back from the Alternate Storage Location to the E: drive on the Content Server and any new recordings will be recorded to this new storage location from now on. To check your new media location, you may select **Administrator Settings > Alternate Storage Location**.



About Windows Server

Selecting this menu item opens up the Windows Server administration page in a separate window.

This page can also be accessed by typing <https://<ContentServerIPAddress>:8098> in the Web browser URL field.

The Windows Administration site can be used for:

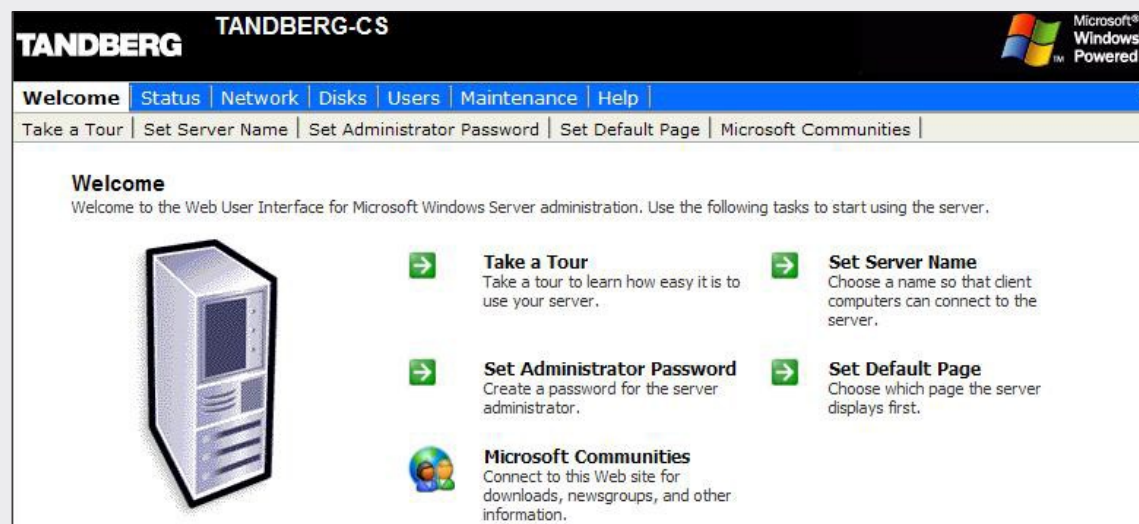
- Changing the Administrative password and updating Date and Time settings
- Creating local user accounts.

Close the window when finished.



The administrator needs to be using Microsoft Internet Explorer to use this menu item.

The Windows Server Page



TANDBERG Content Server



Conference Setup

We recommend that you check out the TANDBERG web site regularly for updated versions of this manual:

<http://www.tandberg.com/support/documentation.php>

Read the Conference Setup section for information on how to make calls from the Content Server User Interface. This section also contains information on how to use and manage Recording Aliases which determine the types of calls users can make, and help manage access to conferences and conference metadata.

Initial Steps When Creating a Conference

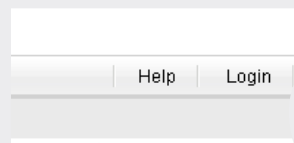
About Conference Setup

The TANDBERG Content Server enables users with **Editor** and **Administrator** privileges to record video calls and to edit their recorded content.

Editors and administrators need to log in to the Content Server to create and edit their conferences.

Logging In

- 1 Click the **Login** button at the top right of the screen.



- 2 Depending on your authentication method, one of the following screens will be displayed.

A screenshot of the TANDBERG Content Server Login form. It has fields for 'Username' and 'Password'. Below the fields are 'Login' and 'Cancel' buttons. There is also a 'Remember my password' checkbox.

Enter your username and password details to authenticate, as indicated in the [Login/Logout](#) section of this User Guide.

A screenshot of a 'Connect to 10.47.1.12' dialog box. It shows a 'User name' field with 'Gandalf' selected and a 'Password' field with masked characters. There is a 'Remember my password' checkbox and 'OK' and 'Cancel' buttons.

- 3 You will see a screen similar to this if you are a conference owner and have the ability to record calls and edit your recorded content.

A screenshot of the TANDBERG Content Server interface showing the 'Recorded Conferences' section. It includes a search bar, a category dropdown set to 'All', and a list of recorded conferences. One conference is listed: 'TANDBERG Content Server: Session #5' with a duration of 00:07:54.

- 4 You will see a screen similar to this if you have administrative privileges.

A screenshot of the TANDBERG Content Server interface showing the 'Recorded Conferences' section with administrative privileges. It includes a search bar, a category dropdown set to 'All', and a list of recorded conferences. Two conferences are listed: 'TANDBERG Content Server: Session #5' and 'TANDBERG Content Server: Session #6'.

About Creating a Conference

In the **Conference Setup** menu in the menu bar, choose the **Create Conference** option. The screen will then look like this.

The Create Conference Settings

Create Conference

Call Information. These settings include **Live** and **On Demand Recording Aliases**, the **Dial Number**, **Bandwidth** and **Call Type** Call Settings.

Conference Permissions. Here you define who should be granted edit rights and who should be granted viewing rights to the conference and a conference password.

Conference Metadata. Metadata gives you the possibility to include such things as:

- The name of the conference that participants will see.
- Details about the conference.
- Name or names of the conference speakers.
- Where the conference takes place.
- Any copyright information about the conference.
- Any keywords that can be used when searching for the conference.
- A category selected from the pull down list for this conference.



Templates Determine Outputs!

The **Recording Alias** determines the outputs for each recorded conference. The call can have a live streamed component or for on demand viewing only.

Please note that all calls are recorded by default.

It is the templates attached to the Recording Aliases that determine which calls have live and/or on demand streaming options.

Check the Template Output Description for the selected Recording Alias for a description of the Outputs.

The Call Information Settings

Call Information

Recording Alias: Default OnDemand only *

Dial Number: *

Bandwidth (kbps): 768

Call type: H.323

Template Output Description:
On Demand: Switching Windows Media Medium (Offline transcoded)

Recording Alias. Choose a **Recording Alias** from the drop down list. A maximum of five calls can be active at any one time and two of these can be streamed live.

Template Output Description. Displays the Viewer outputs, Live and On Demand with the layout, format and size.

Also displays the Downloads for portable devices and for playback on the User's computer.

Note: This gives the Owners the ability to check that they have the correct **Recording Alias** selected for the call.

Dial Number. Enter the number of the endpoint you are calling. The address can be in the format of an IP address, H.323 ID or E.164 alias. H.323 ID and E.164 alias dialing requires a gatekeeper.

Call Settings. By default the Bandwidth is set to 768 and Call type is set to H.323. The bandwidth can be changed and this is related to the Call Configuration used with the Recording Alias. The call type can be H.323 or SIP if the Content Server is registered to a SIP registrar.

The Conference Permissions Settings

Enter user or group names in the **Editors** or **Users** text fields one per line or separated by a semicolon, in the following formats:

Adding users under Local authentication:

Users must be entered in this format:

MACHINENAME\user.name

Local user accounts must be created on the Content Server first (see [Adding Users](#))

Adding local groups is not supported.

Adding users under Domain authentication:

Users must be entered in this format:

DOMAINNAME\user.name or **DOMAINNAME\user.name:Display name**

Groups must be entered in this format: **@group.name**

Adding users under LDAP authentication

Users must be entered in this format: **user.name** or **user.name:Display name**

Groups must be entered in this format: **@group.name**

Editors. Editors can edit and delete a conference.

Users. Users can view the conference.

Entry in this field is disabled if **Allow access to all users** checkbox is selected.



Users have access to view conferences only.

Editors can edit conference permissions and metadata, use the **Content Editor** to change the conference and add further outputs to a completed conference. They can also delete conferences they are editors of.

Allow access to all users. If this checkbox is selected AND **Guest access** is enabled in **Site Settings**, all guests can view the conference.

If **Allow access to all users** checkbox is selected AND **Guest access** is not enabled in **Site Settings**, all authenticated users can view the conference.

Password. Enter a password to restrict streaming access to this conference. If no password is entered, then there is no restriction on who has access to the conference if they can view the conference list.

The Conference Metadata Settings



The **Conference Metadata** will be retrieved from the recording alias that has been selected in the Call Information section of the screen.

When a call is placed, additional metadata on screen will include: date, duration and URL information.

After you have entered the required information click the **Place Call** button to start the call or click the **Return** button to not make the call and leave the screen.

Copyright. Enter any copyright information about the conference.

Keywords. Enter any keywords that can be used when searching for the conference.

Additional metadata displayed for a live call includes: date, duration (duration of 0 will be shown until the call ends) and URL.

Duration. The length of the recorded conference will be displayed in the format hh:mm:ss. The edited conference will display the new length.

URL. The URL to the conference will be displayed at creation time of the conference.

Name. The name of the conference that participants will see.

Description. Details about the conference to be displayed beneath the **Name** in the **Conference** list.

Speaker. Name or names of the conference speakers.

Location. Where the conference takes place.

Category. Select the category from the pull down list for this conference.

Date. The date and time of the start of the conference will be displayed at creation time of the conference.

Live calls only

Call Information: When in a Call

About Call Information

After the **Place Call** button has been clicked on, the call information will be updated with current information about the call.

The Call Information Display

| Call Information | |
|----------------------|-------------------------------|
| Remote System | 9077 |
| Call Protocol | H323 |
| Call Speed | 768 kbps |
| Recording Alias Name | 102 Default Live and OnDemand |
| Video Information | H.264 w720p @ 704 kbps |
| Audio Information | G.722 @ 64 kbps |
| Dual Stream | Disabled |
| Encryption | Off |

Conference Thumbnails. If the call has a live component, beneath the Call Information, thumbnails will be displayed. They are created at 5 seconds, 1 minute, 5 minutes, 30 minutes and 1 hour.

Remote System. The endpoint or device the Content Server is connected to.

Call Protocol. SIP or H.323

Call Speed (kbps). The call speed for the recording.

Recording Alias Name. The recording alias that was used in the call.

Video Information. Displays the protocol, i.e. H.264, for the call, the data rate of the video and the call format.

Audio Information. Displays the protocol, i.e. G.722, and data rate for the audio in the call.

Dual Stream Information. Displays the status of the dual, on or off, and the format.

Encryption Information. Displays the status, on or off, and the algorithm used if it is on.

A Recommended Procedure



You can also end a live call by hanging up the call at the endpoint.



- 1 To end a call from the Content Server Interface, first list the Live Conferences from the **View Conferences** menu. Click the **Edit** link for the conference that you want to end.

Live Conferences

Category: All
There is 1 conference within the "All" category.

Search:

Sort By: Date Added (Desc)

| | | | |
|---|---|--------------------------|---|
|  | Default OnDemand only 19 Oct 07 2:52 PM | Added: 19 Oct 07 2:52 pm |  |
|---|---|--------------------------|---|

- 2 Click on the **End Call** button at either the top or the bottom of the screen.

Edit Conference

The **Recorded Conferences** list will display a small icon on the right hand side of the screen indicating that this conference has more outputs to be transcoded. The icon will be to the left of **Edit**, **Download** and **Play**. What icons are displayed depends on the Template used in the call.



- 3 You will see the **Call Status** change to **Ending Call** and then the conference will be listed in the **Recorded Conferences** list and the **Pending Conferences** list if further outputs need to be created.

Pending Conferences

Category: All
There is 1 conference within the "All" category.

Search:

Sort By: Date Added (Desc)

| | | | |
|---|---|---|---|
|  | Default OnDemand only 19 Oct 07 2:52 PM | Added: 19 Oct 07 2:52 pm Outputs: Formats: Size: |  |
|---|---|---|---|




Recorded Conferences

Category: All
There are 146 conferences within the "All" category.

Search:

Sort By: Date Added (Desc)

1 2 3 4 5 6 7 8 9 10 > Next 10

| | | | |
|---|---|--|---|
|  | Default OnDemand only 19 Oct 07 2:52 PM | Added: 19 Oct 07 2:52 pm Duration: 00:25:45 |   |
|---|---|--|---|

Dialing in

Users can record their calls by dialing in to the Content Server from H.323 devices.

It is possible to make calls by dialing:

- **The Content Server IP address**—this feature does not require the Content Server to be registered to the gatekeeper.
- **The Content Server system name or E.164 alias**—this feature requires the Content Server to be registered to the gatekeeper.
- **The H323 ID or E.164 alias of a recording alias**—this requires the Content Server to be registered to the gatekeeper.
- **The Content Server SIP URI**—this feature requires the Content Server to be registered to a SIP registrar.
- **The SIP URI of a recording alias**—this requires the Content Server to be registered to a SIP registrar.

Concurrent Calls

It is possible to make up to 5 concurrent calls, of which two can be broadcast live.

The same recording alias can be used for the two live calls and another one, with no live component, can be used for the other three calls. Also, 5 different recording aliases can be used for the 5 calls.

Recording in Progress Is Indicated on the Endpoint

Once connection to the Content Server has been established, a Recording conference poster will be displayed at the endpoint.

If the template has a live output, the call will be streamed live and available for viewing on demand.

If the template does not have a live output, it will be available for on demand viewing. Calls made from endpoints to the Content Server begin recording once the call setup is complete and the Content Server begins receiving audio and video from the endpoint.



About TMS Scheduling

It is possible to schedule calls to be recorded by the Content Server through TMS (TANDBERG Management Suite, available separately).

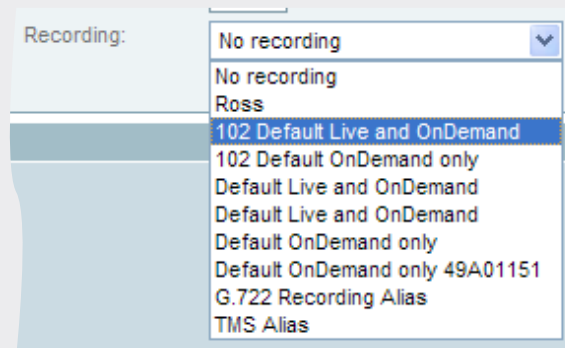
In order to use TMS to book recordings on the Content Server, you need to:

1. Enable the API in
[Content Server Site Settings > API](#)
2. Add the Content Server to TMS

If the Content Server is registered to a gatekeeper in Gateway mode, users booking a conference in TMS 11.8 can choose from a range of System Aliases and their Personal Recording Aliases. No further special configuration is necessary on the Content Server side.

If the Content Server is registered to a gatekeeper in Terminal mode, only System Aliases and dedicated Personal Aliases (with the owner set to api-admin) will be available for recording conferences. See below for configuration notes.

Scheduling Calls with TMS



A user who logs in to TMS 11.8 with their user name will see their own Personal Recording Aliases and any System Aliases in the Recording List of Aliases.

This graphic displays the Personal Recording Alias Ross and the two System Aliases, 102 Default Live and OnDemand and 102 Default OnDemand only.

TMS 11.8 offers full support for Recurrent meetings.

Creating a Dedicated TMS Alias¹

Add a new user with the username **api-admin** under [Administrator Settings > User Management > Add Users](#) (Add Administrators field)

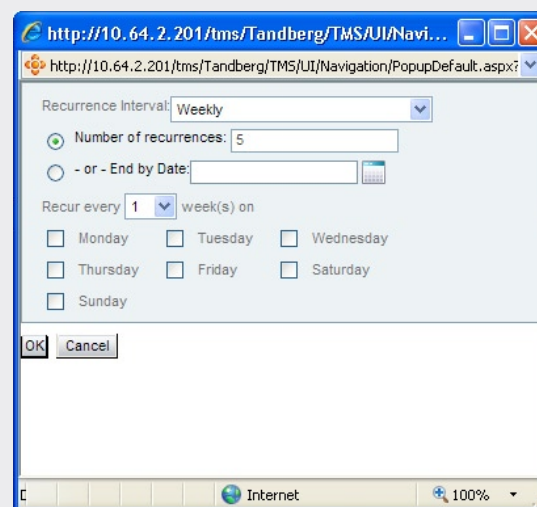
Create a new alias under

[Conference Setup > Recording Alias Options > New: Name](#), e.g. TMS, Owner:api-admin

Do NOT check the System Alias checkbox—the TMS alias must be a Personal alias.

Create dedicated TMS-only Recording Aliases. Only those aliases will be available for booking by TMS.

For more information on TMS integration, refer to the TANDBERG Management Suite Administrator Guide or contact your TANDBERG representative or authorized reseller.



Graphic shows the user booking a series of recurrent meetings through TMS.

Current meetings that are recorded with the TANDBERG Content Server will be displayed in the Live Conferences List when they are occurring and when completed will be available from the Recorded Conferences List.



Content Server v.3.0 is backwards compatible with TMS 11.7 for booking a Transcoding call, using a dedicated TMS-only Recording Alias. Archiving call support is not available.

¹) When the Content Server is in Terminal mode

About Recording Alias Options

The default TANDBERG Content Server installation has two default system aliases available.

The two default aliases are:

- Default Live and OnDemand
- Default OnDemand only

Multiple concurrent calls can be made using both those aliases but of the five concurrent calls, up to two can be live.

The recording alias determines:

- The call type—live or on demand.
- The outputs, based on the recording template and call configuration specified in the alias.
- Access to the live and recorded conference.
- Conference password (optional).

All conference metadata, such as name, description, speaker, location, copyright and category specified in the alias will be automatically applied to the conference and can be edited before the call is placed and also after the call has finished.

Calls made with the same alias will have the same default settings, but different conference URLs.

Recording Alias Options Available Depend on Your Privileges

Recording Aliases

| <input type="checkbox"/> Name ^ | H323 Alias | E164 Alias | Sip Uri |
|---|-------------------------|------------|-----------------------|
| <input type="checkbox"/> 102 Default Live and OnDemand Edit | LiveTANDBERG-2AB501 | 1020001 | 1020001@tandberg.com |
| <input type="checkbox"/> 102 Default Live and OnDemand 2 Edit | LiveTANDBERG-2AB5012 | 10200012 | 10200012@tandberg.com |
| <input type="checkbox"/> 102 Default OnDemand only Edit | OnDemandTANDBERG-2AB501 | 1020007 | 1020007@tandberg.com |
| <input type="checkbox"/> api Edit | api | 1029077 | |
| <input type="checkbox"/> MPEG4 Edit | MPEG4 | 1029066 | 1029066@tandberg.com |
| <input type="checkbox"/> Ross Edit | Ross | 1029033 | |

Recording Aliases

| Name ^ | H323 Alias | E164 Alias | Sip Uri |
|----------------------------|------------|------------|----------------------|
| MPEG4 Edit | MPEG4 | 1029066 | 1029066@tandberg.com |
| Ross Edit | Ross | 1029033 | |

Recording Aliases

You have no Recording Aliases to display.

The recording alias options are available from the **Conference Setup** menu and only for users with administrator or owner privileges.

By choosing the recording alias options an administrator will see a screen like the one shown here.

For the same aliases, an owner (a user with privileges to make calls) will see only their personal alias or aliases, if the administrator has set them up with owner privileges for an alias.

Another owner (a user with privileges to make calls) may see no aliases at all, if the administrator has not set them up with owner privileges for an alias.

Aliases can be sorted according to their column title in both ascending and descending order.

The number of aliases displayed on a page can be 5, 10, 20, 50 or 100.

Navigating between pages is consistent with the view conference screens.

About Creating New Aliases

Only administrators of the TANDBERG Content Server can create recording aliases.

Click the **Add Recording Alias** button on the screen to create a recording alias.

An Overview of the Options

Recording Aliases

| <input type="checkbox"/> | Name |
|--------------------------|--|
| <input type="checkbox"/> | 19thOctober Edit |
| <input type="checkbox"/> | Default Live and OnDemand Edit |
| <input type="checkbox"/> | Default OnDemand only Edit |
| <input type="checkbox"/> | Demo Edit |
| <input type="checkbox"/> | Labour VWeekend Edit |
| <input type="checkbox"/> | Live/OD Remote Joined MPEG4 Large Edit |

[Delete Selected](#) [Add Recording Alias](#)

Add Recording Alias

[Save](#) [Return](#)

Recording Alias

Name

System Alias ☐

Owner

Properties

Settings

Default Conference Permissions

Default Conference Metadata

[Save](#) [Return](#)

Recording Alias. Specify the name for the recording alias to display in the list of aliases and when creating a conference. Select the owner for the alias. The owner will be able to edit the alias and select it when creating an ad hoc conference from the interface.

Properties. Lets you create a unique H.323 ID, a unique E.164 alias. Also select if this is a system alias.

Settings. Used to select the recording template and the call configuration file to use with this alias.

Default Conference Permissions. Used to specify the users (viewers) and editors of the conference. Also assign a password to the conference.

Default Conference Metadata. Used to specify information about the conference, including name, description, speaker, location, copyright, keywords and category.

About Recording Aliases

Owners can edit their recording aliases and they will be displayed in the **Recording Aliases** page from the **Conference Setup** menu.

Administrators can see and edit all properties of all aliases. Owners can only see and edit selected properties of their own alias.

An Overview of the Options

The screenshot shows a form titled "Recording Alias" with three fields: "Name" (a text input field), "System Alias" (a checkbox), and "Owner" (a dropdown menu). Three orange arrows originate from the right side of the page and point to these fields: one to the "Name" input, one to the "System Alias" checkbox, and one to the "Owner" dropdown menu.

Name. Enter a meaningful name for the recording alias as this will display in the list of recording aliases as well as in the drop down list when creating an ad hoc conference.

System Alias. Select if this is a system alias.

System vs Personal. If you select the **System Alias** checkbox, the alias will be available for all users for dialing out from the Create Conference page. If you do not select the **System Alias** checkbox, the Alias becomes a Personal alias, so it will only be available on the Create Conference page to the Owner of that Alias.

Owner. Select the owner of the Alias so they have editing rights as well as being able to select it when creating a conference.

About Specifying Properties

Types of Aliases

Live streaming vs. non-live streaming.

Recording aliases can have a live output or just on demand outputs.

System vs Personal. If you select the **System Alias** checkbox, the alias will be available for all users for dialing out from the **Create Conference** page. If you do not select the **System alias** checkbox, the alias becomes a personal alias, so it will only be available on the **Create Conference** page to the owner of that alias.

An Overview of the Options

| Properties | |
|-------------------|----------------------|
| H.323 ID | <input type="text"/> |
| E.164 Alias | <input type="text"/> |
| Display name | <input type="text"/> |
| SIP Address (URI) | <input type="text"/> |

H.323 ID. Choose a unique H.323 ID for the alias. If the Content Server is registered to the gatekeeper as terminal, this alias can be used for dialing. If the Content Server is registered to the gatekeeper as gateway, this alias needs to be used with a prefix specified in **Site Settings**.

E.164 Alias. Choose a unique E.164 alias. If the Content Server is registered to the gatekeeper as terminal, this alias can be used for dialing. If the Content Server is registered to the gatekeeper as gateway, this alias needs to be used with a prefix specified in **Site Settings**.

Display name (for SIP registration).

SIP address (URI). The alias address to call when making a SIP call.

Specify Settings

About Specifying Settings

The combination of **Template** and **Call Configuration** settings determines the outputs of your call made with this recording alias.

An Overview of the Options

The screenshot shows a 'Settings' window with two dropdown menus on the left: 'Template' set to 'Windows Media PoP Live and On Demand' and 'Call Configuration' set to 'System Call Configuration'. To the right is a 'Template Output Description' box containing the text: 'Live: Two videos Windows Media Medium' and 'On Demand: Two videos Windows Media Medium (Live transcoded)'. Three orange arrows point from the text on the right to these three elements: the top arrow points to the 'Template' dropdown, the middle arrow points to the 'Template Output Description' box, and the bottom arrow points to the 'Call Configuration' dropdown.

Template. Select the recording template to use with this alias. Check whether the template being selected has a live component.

Template Output Description. Displays the Viewer outputs, Live and On Demand with the layout, format and size.

Also displays the Downloads for portable devices and for playback on the User's computer.

Note: This gives the Owners the ability to check that they have the correct template selected for the Recording Alias.

Call Configuration. Choose the call configuration file to use with this alias.

Specifying Default Conference Properties

Entering User Names

Enter user or group names in the editors or users text fields one per line or separated by a semicolon, in the following formats:

Adding users under Local authentication:
Users must be entered in this format:

MACHINENAME\user.name

Local user accounts must be created on the Content Server first (see [Adding Users](#))

Adding local groups is not supported.

Adding users under Domain authentication

Users must be entered in this format: **DOMAINNAME\user.name** or **DOMAINNAME\user.name:Display name**

Groups must be entered in this format: **@group.name**

Adding users under LDAP authentication

Users must be entered in this format: **user.name** or **user.name:Display name**

Groups must be entered in this format: **@group.name**

Editors. Editors can edit and delete a conference.

Users. Users can view the conference.

Entry in this field is disabled if **Allow access to all users** checkbox is selected.

Editors entered into the **Recording Alias** will be able to edit the resulting Conferences created using the **Recording Alias**.

If no **Editors** are entered, either the administrator or the owner of the Recording Alias must edit the conference when it has concluded to add in more editors.

An Overview of the Options

Allow access to all users. If this checkbox is selected AND **Guest access** is enabled in **Site Settings**, all guests can view the conference.

If **Allow access to all users** checkbox is selected AND **Guest access** is not enabled in **Site Settings**, all authenticated (logged in) users can view the conference.

Password. If a password is entered into the **Recording Alias**, all conferences made with this recording alias will have the same password.

Specifying Default Conference Metadata

About Default Conference Metadata.

The Metadata entered into a Recording Alias is copied into the Conference Metadata for a call that uses the Recording Alias.

Owners of the Recording Alias can change the contents of the fields at any time.

Editors can change the Metadata of the Conference only after the call has concluded.

An Overview of the Options

The screenshot shows a web form titled "Default Conference Metadata". It contains the following fields and controls:

- Name:** A single-line text input field.
- Description:** A multi-line text area.
- Speaker:** A single-line text input field.
- Location:** A single-line text input field.
- Copyright:** A single-line text input field.
- Keywords:** A single-line text input field.
- Category:** A dropdown menu currently showing "-- No Category Selected --".
- Buttons:** "Save" and "Return" buttons at the bottom left.

Orange arrows point from descriptive text boxes on the right to each of these fields.

Conference Name. The conference name displayed when conferences are listed. If no name is entered, one will be created at time of recording the conference. The default created conference name is made up of the recording alias name and the date/time of the call.

Description. Enter a description for the conference as this also appears under the name when conferences are listed in the interface.

Speaker. Enter the name of the main presenter of the conference as this is displayed on the conference list in the interface.

Location. Enter the location of the conference.

Copyright. Enter any copyright information applicable.

Keywords. List keywords as these are also searchable from the [View Conferences](#) menu items.

Category. Choose a category that this conference best fits. This enables a user to list like conferences in the interface.

Editing Recording Aliases

TANDBERG CONTENT SERVER
ADMINISTRATOR GUIDE

Who Can Edit What?

Administrators can edit all recording aliases but owners can only edit some settings in their own aliases.

What Administrators Will See

Recording Aliases

| Name | Edit |
|----------------------------------|------|
| 19thOctober | Edit |
| Default Live and OnDemand | Edit |
| Default OnDemand only | Edit |
| Demo | Edit |
| Labour Weekend | Edit |
| LiveIO Remote Joined MPEG4 Large | Edit |

Delete Selected Add Recording Alias

Edit Recording Alias

Save Save As Return

Recording Alias

Name: Default OnDemand only

System Alias: ☒

Owner: System Administrator (Administrator)

Properties

Settings

Template: Windows Media Single On Demand Only

Template Output Description: On Demand: Switching Windows Media Medium

Call Configuration: System Call Configuration

Default Conference Permissions

Default Conference Metadata

Name:

Description:

Speaker:

Location:

Copyright:

Keywords:

Category: -- No Category Selected --

Save Save As Return

This screen is similar to the screen you see when creating new recording aliases. If you are an administrator you may edit all there is to edit.

Click the **Edit** link next to the alias name to edit it.

What Owners Will See if They Have a Recording Alias

Owners can edit:

- The recording template (select a template from the drop-down menu)
- Default Conference Permissions (who can edit and view the conference)
- Conference password
- Default Conference Metadata (used for display and searching of the conferences).

Recording Aliases

| Name | Edit |
|------------------------|------|
| Ross's Alias | Edit |
| Ross's iPod Video only | Edit |

Click the **Edit** link next to the alias name to edit it.



Refer to the previous pages for a list of all the fields and their description.

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Delete Recording Aliases

About Deleting

Only administrators can delete recording aliases.

To delete all recording aliases, click the select box next to the title **Name** and click the **Delete Selected** button.

To delete a single alias, select the check box to the left of the alias's name and click the **Delete Selected** button.



The recording alias that is the Default Recording Alias, has its check box greyed out and so cannot be deleted.

Selecting Which Ones to Delete

Recording Aliases

| <input type="checkbox"/> Name | H323 Alias | E164 Alias | Sip Uri |
|---|------------------|-------------|-------------------------|
| <input type="checkbox"/> 19thOctober Edit | 18thOctober | 1029063 | |
| <input type="checkbox"/> Default Live and OnDemand Edit | Live49A01041 | 10643102001 | tcs102live@tandberg.com |
| <input type="checkbox"/> Default OnDemand only Edit | OnDemand49A01041 | 10643102002 | tcs102od1@tandberg.com |
| <input type="checkbox"/> Demo Edit | | 00520 | |
| <input type="checkbox"/> Labour Weekend Edit | | 1029044 | |
| <input type="checkbox"/> Live/OD Remote Joined MPEG4 Large Edit | remoteQT102 | | |

Delete Selected

Add Recording Alias

TANDBERG Content Server



View Conferences

We recommend that you check out the TANDBERG web site regularly for updated versions of this manual:

<http://www.tandberg.com/support/documentation.php>

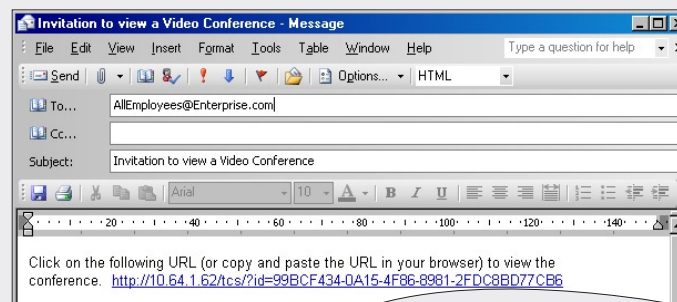
This section contains information about the View Conferences menu, including live, recorded and pending views and explains different conference views and permissions depending on user roles and access lists set on conferences. Here you will also find instructions on how to get help when using the TANDBERG Content Server.

About Conference Types

The three types of conference views are

- Live
- Recorded
- Pending

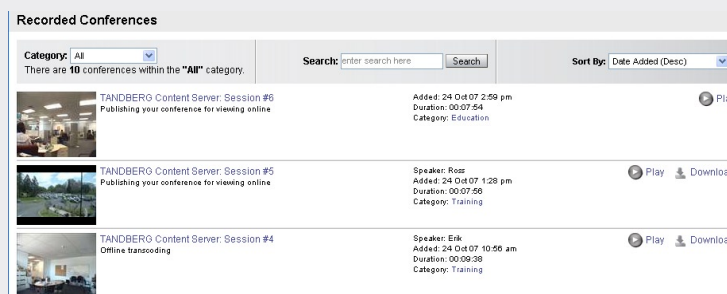
Details



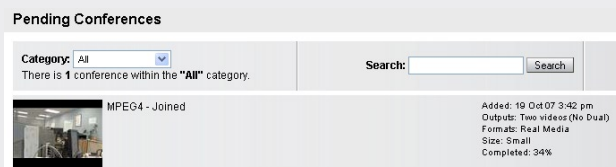
Live. They are occurring at the current time. Users can receive an e-mail with a URL link to view the conference. They can also click the link provided in the list of live conferences.



If the live conference finishes while you are watching it, you can close the window and reopen it to watch the recorded conference.



Recorded. These conferences have finished and are now viewable at any time. To view one of the types of conferences, click on the **View Conferences** text link and choose from the list. Click the **Download** option for playback of files on your portable player or on your computer using your video player.



Pending. These are conferences that have completed and are waiting for their outputs to be created. When an output has been created for a conference, for display in the viewer or for download, the conference will be available in the **Recorded Conferences** view. When all outputs have been created the conference will moved from the **Pending** view to the **Recorded Conferences** view.

Navigating the Interface

Category

Each conference can be assigned a **Category** at time of creation or after the conference has concluded.

By default all conferences are displayed in the interface.

By selecting a category, only conferences that are assigned that category will be displayed.

In this example there are 7 conferences with the category *Training*. Clicking on a displayed category for a conference will also display all conferences belonging to that category.

Category: Training
There are 7 conferences within the "Training" category.

Sorting Conferences

To sort conferences, use the **Sort By:** options at the top right of the screen.

Desc stands for **Descending** (going down a mountain) and means Newest first for Date Added and (Z to A) for Conference Name, Speaker and Location.

Asc stands for **Ascending** (going up a mountain) and means Oldest first for Date Added and (A to Z) for Conference Name, Speaker and Location.

Sort By: Date Added (Desc)
Date Added (Desc)
Date Added (Asc)
Conference Name (Asc)
Conference Name (Desc)
Speaker (Asc)
Speaker (Desc)
Location (Asc)
Location (Desc)

Searching

Conferences can be searched by **Name**, **Description**, **Speaker**, **Copyright**, and **Keywords**.

To search for a conference, enter the search criteria in the search field and click on the **Search** button.

The conference list will show only those conferences that match your search criteria.

Clicking the **"<< Return to Content Library"** text link will return the user and display all conferences.

Searching within a Category. Select the **Category**, enter the search criteria and then click the **Search** button. If you search is not successful, change your search criteria, search all conferences or return to the Content Library to enter other search words

Search Results
You searched for "MPEG4" within **All** category.
Your search returned **22 conferences**
[<< Return to the Content Library](#)

Search: MPEG4 **Search**

Use **AND** to find conferences that have both terms in the searchable fields, e.g. **training AND education** will find all conferences with both training and education in name, description, speaker copyright or keywords.

Use **OR** to find conferences that contain either term in the searchable fields, e.g. **training OR education** will find all conferences with either training OR education in the title, description or as keywords.

Use **NOT** to find conferences that do not contain the word or phrase, e.g. **NOT training** will find all conferences that do not contain the word training.

Use **" "** to find conferences that contain the exact text between the quotes marks, e.g. **"Archived Conference"** will find all conferences that have the exact phrase between the quotes contained in the searchable fields.

Navigation Options

The initial view of a screen that consists of a number of pages to display will look something like this view.

In this example there are more than 10 pages of screens and 51 conferences found for the current category and search.

Navigate the screens by clicking on the page numbers or the forward arrow to advance one page at a time.

After Page 1 the **Previous Page Arrow** will also be clickable.

When the last page is reached the **Next Page Arrow** will no longer be available.

When there are more than 10 pages of information, the **Next 10** pages link will appear after the next arrow.

Click on the **Next 10** and **Prev 10** links to move between the pages in groups of 10.

The numbers indicate each screen (page) of conferences displayed in order of how the conferences have been sorted using the column headings.

Recorded Conferences

Category: **All**
 There are **51** conferences within the "All" category.

Search:

Sort By: **Date Added (Desc)**
 1 2 3 4 5 6 7 8 9 10 > Next 10

Sort By: **Date Added (Desc)**
 1 2 3 4 5 6 7 8 9 10 > Next 10

Sort By: **Date Added (Desc)**
 < 1 2 3 4 5 6 7 8 9 10 > Next 10

Sort By: **Date Added (Desc)**
 Prev 10 < 21 22 23 24 25 26 27 28 29 **30**

Sort By: **Date Added (Desc)**
 Prev 10 < **11** 12 13 14 15 16 17 18 19 20 > Next 10

Total number of conferences in this list.

Click on the **Next Page Arrow** to go to the next page.

Click on the **Page number** to go directly to that page.

Current page is shown with **strong** typeface.

Prompting Users to Log in to View a Conference

Setting up Authenticated Access

Users of the TANDBERG Content Server may be prompted to login to view conferences.

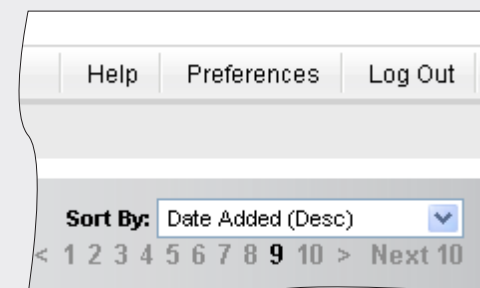
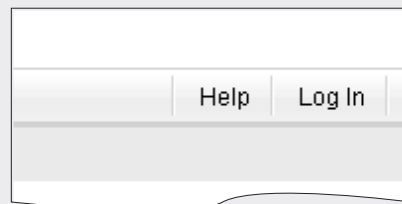
If the Content Server has [Guest Access](#) enabled in [Site Settings](#) then non-authenticated users will be able to browse conferences that allow all users to view them without logging in.

For authenticated access to the Content Server:

- If **Local authentication** has been selected in [Site Settings](#), local users can log in by entering their user name and password.
- If **Domain authentication** has been selected in [Site Settings](#), LDAP server details have been provided and the Content Server has been added to a domain, domain users can log in by entering their DOMAINNAME\Username and password.
- If **LDAP authentication** has been selected in [Site Settings](#) and LDAP server details have been provided, LDAP users can log in by entering their user name and password.

Click the [Logout](#) link when finished.

Login and Logout



Context Sensitive Help

About Context Sensitive Help

The TANDBERG Content Server now has context sensitive help for all screens.

Activate this by clicking **Help** at the top right of each screen. A question mark will be activated for any on screen help.

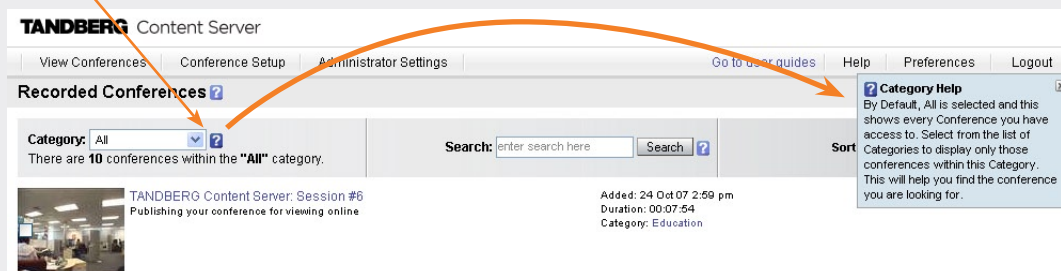
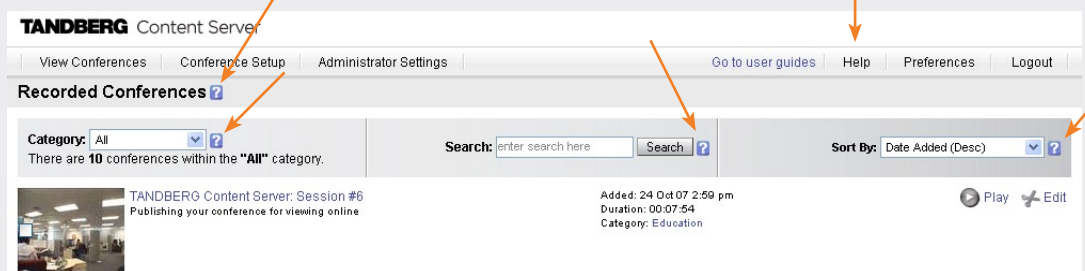
A link to the user manuals on the TANDBERG web site will also be displayed next to the help link.

The **Help question marks** will stay on each screen until the user clicks on **Help** again to turn Help off.

The link **Go to user guides** opens a new window to the **Documentation page** on www.tandberg.com for users to find the TANDBERG Content Server User Manual.

In this example, the **Category question mark** has been clicked.

Examples

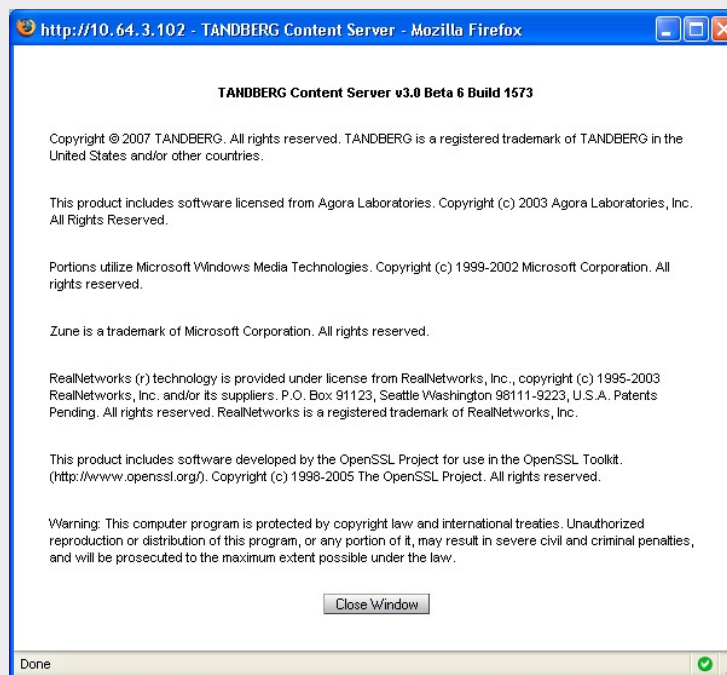
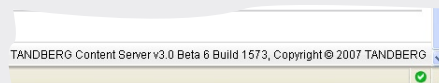


About Displaying Copyright

To display copyright information, click on the text in the lower right corner of the screen.

This is copyright information regarding the Content Server as such and it contains no copyright information regarding the recorded material itself.

The Copyright Display



About User Preferences

To change your preferences, click the **Preferences** link at the top right of the screen or on your user name displayed at the bottom left of the screen.

This will display your user preferences enabling you to modify them.

Your **Display Name** as displayed at the bottom left of the screen before your User Name.

The number of **Items per page** can be set to **5**, **10**, **20**, **50** or **100**.

The **Default Category**, so on logging in, that category will be selected so that conferences only belonging to that category will be displayed.

Select **Automatically determine my optimum conference size** so that when a conference is chosen to play, the best size for the users connection will be presented. Conferences where the size is too big for the current connection will have an indication in the interface.

Select your optimum size if you don't want the Content Server calculate it for you.



The changes will take effect the next time the user logs into the Content Server.

User Preferences Pop-up Window

The screenshot shows the 'Edit User Preferences' window. At the top, there is a navigation bar with 'Help', 'Preferences', and 'Logout' links. The main window is titled 'Edit User Preferences' and contains two sections: 'User Details' and 'User Preferences'. The 'User Details' section shows 'User Name' as 'Administrator', 'Role' as 'admin', and 'Display Name' as 'System Administrator'. The 'User Preferences' section includes 'Items Per Page' (set to 5), 'Category' (set to 'All'), a checkbox for 'Automatically determine my optimum conference size' (unchecked), and 'Size' (set to 'Large'). At the bottom of the 'User Preferences' section are 'Save' and 'Return' buttons. Arrows from the text on the left point to these elements: 'Preferences' link, 'Display Name', 'Items per page', 'Default Category', 'Automatically determine my optimum conference size', 'Size', and the 'Save' button.

Select the **Size** of the conference you want to watch. This will not take into account your current Internet connection speed but will deliver up the size conference you request, or the next largest. i.e. if you select **Large** and the biggest size is **Medium**, then that is what you will view. Users may not experience optimal viewing if their connection speed is significantly lower than the size they select.

- Click **Save** to update the User information.
- Click **Return** to go back to the previous screen.

Content Viewer

TANDBERG CONTENT SERVER
ADMINISTRATOR GUIDE

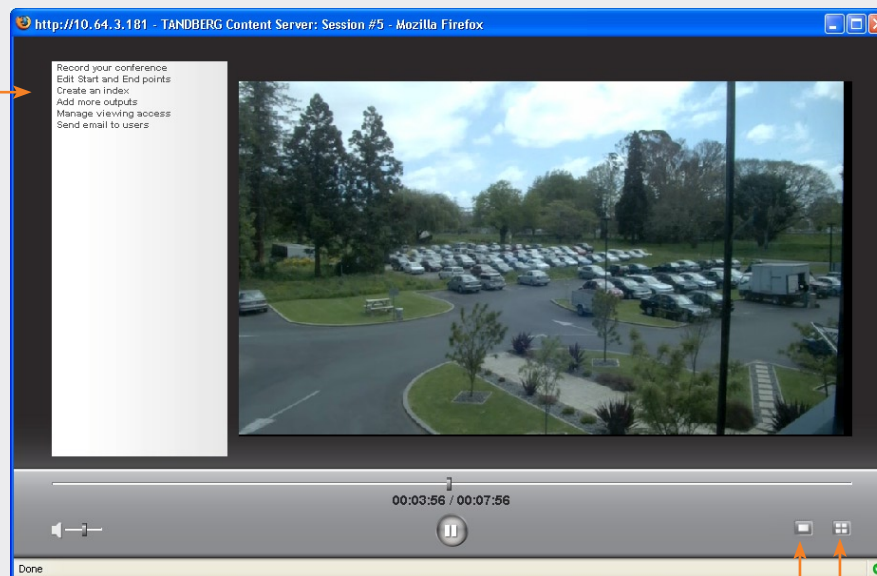
Accessing Content Viewer

To access the **Content Viewer**, click on the thumbnail, the conference name or the **Play** icon and text. The viewer will display the best conference for your connection, as determined by your [preferences](#).

The content window consists of the main and dual streams, the indexes and the controls.

The **Conference Indexes** are displayed if there are any.

The Content Viewer Display



The Window will display the video, either as two videos (main and dual separate), joined (main and dual as one), switching (main then dual when it is activated) or picture in picture (big dual and main in a corner). Indexes will be presented if they are present.

Click here to close the **Content Viewer**.

The **Slide list** icon displays the still images taken of the Dual Stream for an Audio or a Small Video sized Conference. Clicking a slide will display and advance the Conference to that position. Alternatively, clicking the icon again will remove the slide list from view.

The **Next layout** icon displays the next screen layout. Clicking will toggle through the different layouts available for the conference.

The Video Display

The Video Display Sizes

The Conference is displayed in a window scaled for the size, conference format and items in the conference. A Conference that has indexes and dual with the main video will be displayed differently to a conference that has just one video output.

There Are Two Ways to View a Video

1. The whole video is downloaded to your computer before it can be viewed (pseudo-streaming)

A white line in the Play Progress Bar shows you the download progress. When the video has completely downloaded, it is ready for you to play by moving the slider or clicking on any of the [Conference Indexes](#).

You can still start playing the video before it is completely downloaded but you can only move the slider to any position within the white line.

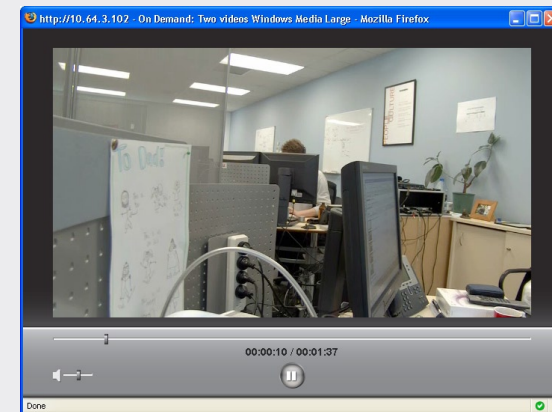
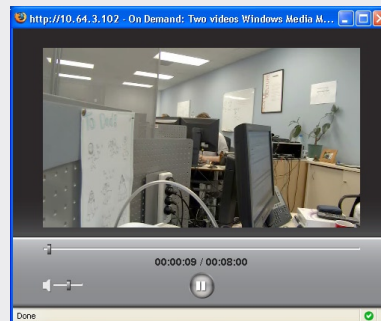
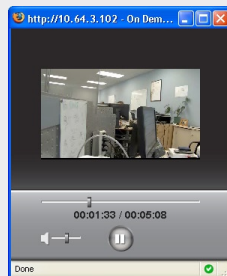
2. The video is streamed (true streaming)

The white line will not be displayed in this case.

You can move the slider to any part of the video to view it. The video will stop, load the requested part of the video to your browser (called 'buffering') and then begin playing.

You can also click on an item in the [Index](#) to view the video from that location

Examples of Video Display Sizes



Different Layouts and Screen Sizes



Change the size of the display by maximising the window, or by dragging the window manually using the control at the bottom right of the window. The conference will adjust to a "best fit" for the size of the window.

The Video Display Controls

Controlling the Video Display

The video display controls let you start and pause the video as well as adjust the volume.

You can use the **Play progress bar** to move to any position in the video.

The **Sound level controller** is for adjusting the volume of the video.

Drag the volume slider right to increase the volume or left to decrease the volume.



Check your computer's audio level if no sound can be heard.



Play Pause

Click the **Play** button and the presentation will play from the current position of the slider.

The button will now change to the **Pause** button. Click to **Pause** the presentation. Click again to start playing.

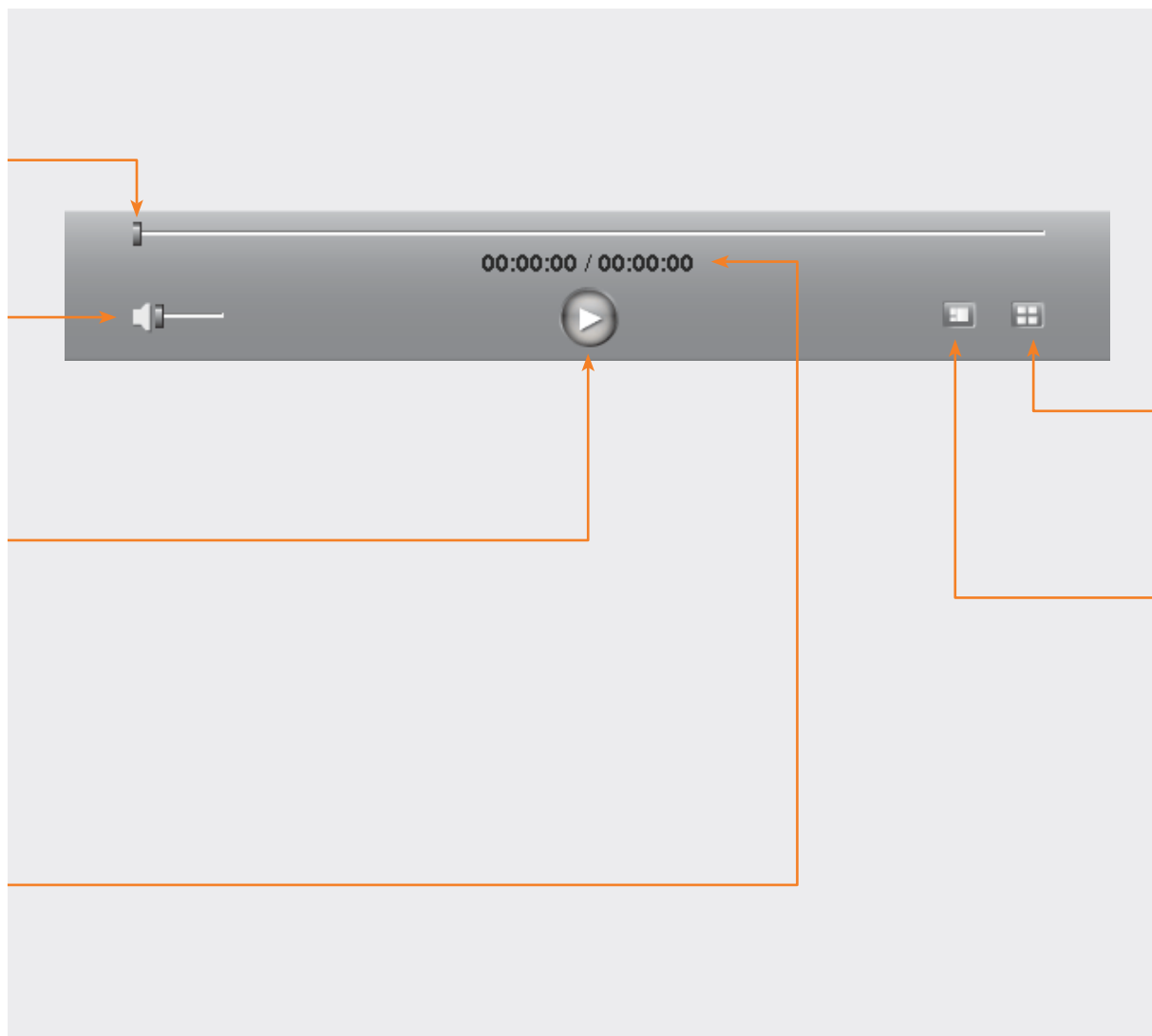
The numbers on the **Time indicator display**:

Left: the time elapsed from the start of the video.

Right: the total length of the video.

The format of the time display is hours: minutes: seconds.

The Video Display Control Features



The **Play Progress Bar** shows:

- the progress of the downloading video
- the position where the video is playing
- a slider you can move to any position in the video.

The **Slide list** icon displays the still images taken of the Dual Stream for an Audio or a Small Video sized Conference. Clicking a slide will display and advance the Conference to that position. Alternatively, clicking the icon again will remove the slide list from view.

The **Next layout** icon displays the next screen layout. Clicking will toggle through the different layouts available for the conference.

About Indexes

Indexes are available in the viewer if an editor of the conference has created them in the Content Editor. Indexes are used to progress the conference to the time where the index was added.

Indexes save time when users are trying to find a specific place in a conference to review.

Index Features

By clicking an item in the **Index**, the video will move and start playing at that reference point and display the corresponding slide.

Link up the Indexes to the lower right list of Indexes in the interface.



The Presentation Window

About the Presentation Window

Your presentation will look differently depending on the type of layout you choose for your conference. You have four choices:

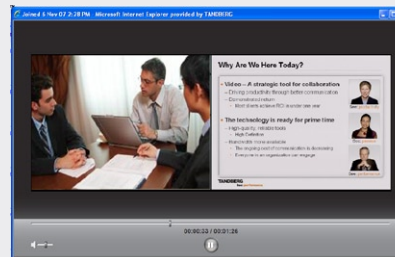
- Switching
- Two videos
- Joined
- Picture in picture.

Switching. If you open Dual Video stream during the conference, it will replace the view from the main camera in the **Viewer**.

Two videos. If Dual Video is activated during the conference, it will be displayed alongside the main video.

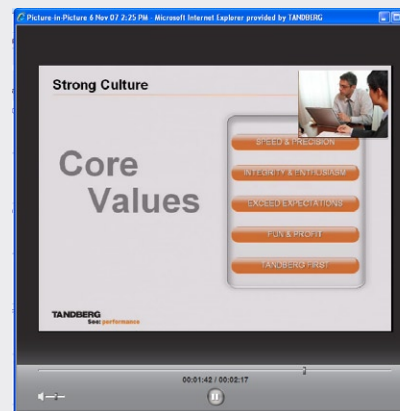
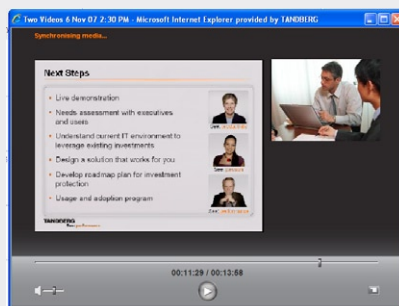
If Dual Video is never opened during the conference, then after the conference has been transcoded, only the video from the main source will be available on demand.

How The Different Layouts Look



Joined. In the Joined layout, the presentation is always displayed to the right of the main video.

If Dual Video is never activated during the conference, a TANDBERG streaming poster will be displayed.



Picture in picture. In this layout, your presentation is displayed in the main part of the window, and the main video source is an inset picture in the top right corner (the location of the inset picture can be changed in the template).

If Dual Video is never activated during the conference, only the main video will be displayed in the Viewer.

Editing Recorded Conferences

About Editing Conferences

Recorded conferences can be edited. Conference permissions and metadata can be changed. Using the **Content Editor**, indexes can be added, conferences can have their In (start) and Out (end) points changed and another conference can be added. Also, additional outputs to the original template can created using **Add Outputs**.

This can all be done from the **Edit Conference** Page.

Kindly observe the following:

- Only editors and administrators can edit conferences.
- Editors can edit their own conferences.
- Administrators can edit all conferences.

Deleting Conferences

In the Recorded Conferences page, to delete one or more conferences, select the check box on the conference thumbnail and click the **Delete Selected** button at the bottom left of the page. To delete all conferences on the page, Click the **Select All** button and click the **Delete Selected** button, both located at the bottom left of the **Recorded Conferences** page.

The Editing Conferences Page

Edit Conference

Save Return Content Editor Add Outputs

Conference Permissions

Users Editors

☐ Allow access to all users

Administrator

Local Format
Users: MACHINENAME\user.name

Domain or LDAP Format
Users: user.name
Groups: @group.name

Password

Conference Metadata

Name On Demand: Two videos Windows Media Medium

Description

Speaker

Location

Copyright

Keywords

Category -- No Category Selected --

Date 19 Oct 07 4:45 pm

Duration 00:08:00

URL http://10.64.3.102/tcs/?id=BFADB665-8B0C-44FB-9841-CD0E8D5B239B Play Email

Conference Thumbnails

Save Return Content Editor Add Outputs

From this page editors and administrators can edit the conference permissions (i.e. who can view and edit the conference), conference metadata: such as name, description, speaker, etc. There are also buttons for the **Content Editor** and **Add Outputs**.

Editing Conference Permissions

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ADMINISTRATOR GUIDE

About Editing Permissions

Editors. Editors can edit and delete a conference.

Users. Users can view the conference.

Entry in the Users field is disabled if **Allow access to all users** checkbox is selected.

Enter user or group names in the Editors or Users text fields one per line or separated by a semicolon, in the following formats:

Adding users under Local authentication:
Users must be entered in this format:

MACHINENAME\user.name

Local user accounts must be created on the Content Server first (see [Adding Users](#))

Adding local groups is not supported.

Adding users under Domain authentication

Users must be entered in this format: **DOMAINNAME\user.name** or **DOMAINNAME\user.name:Display name**

Groups must be entered in this format: **@group.name**

Adding users under LDAP authentication

Users must be entered in this format: **user.name** or **user.name:Display name**

Groups must be entered in this format: **@group.name**

The Editing Conferences Permissions Page

Conference Permissions

Users **Editors**

☐ Allow access to all users

Users: ANICHOLPCVAdministrator

Editors: ANICHOLPCVAdministrator

Password:

Local Format
Users: MACHINENAME\user.name

Domain Format
Users: DOMAINNAME\user.name Groups: @group.name

LDAP Format
Users: user.name Groups: @group.name

Allow access to all users. If the Allow access to all users checkbox is selected AND **Guest access** is enabled in **Site Settings**, all guests and authenticated users can view the conference.

If the **Allow access to all users** checkbox is selected AND **Guest access** is not enabled in **Site Settings**, only authenticated users can view the conference.

If the **Allow access to all users** checkbox is not selected, editors can add individual users in the **Users** and **groups** into the **Users Field** so they will have access to view the conference.

Password. Enter a password to restrict streaming access to this conference.

If no password is entered, then there is no restriction on who has access to the conference if they can view it in the conference list.

Editing Conference Metadata

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The Editing Conferences Metadata Page

All the fields shown here, except the **Name** are optional and can be left empty, but the more metadata provided will make it easier for users to find your conference.

Click the **Save** button if you have made changes to any fields on the screen.

Click **Return** to go back to the Conference List.

Copyright. Enter any copyright information about the conference.

Keywords. Enter any keywords that can be used when searching for the conference. Separate each keyword with a space.

URL. The Conference URL is displayed on this page with two links available, Watch and Email:

Clicking on **View** to open the conference in the Viewer to watch or listen to.

Clicking on **Email** will create a new email message in your email client with the conference URL which you can send to users.

The screenshot shows the 'Conference Metadata' form with the following fields and values:

- Name:** On Demand: Two videos Windows Media Medium
- Description:** (Empty text area)
- Speaker:** (Empty text field)
- Location:** (Empty text field)
- Copyright:** (Empty text field)
- Keywords:** (Empty text field)
- Category:** -- No Category Selected --
- Date:** 19 Oct 07 4:45 pm
- Duration:** 00:08:00
- URL:** http://10.64.3.102/tcs/?id=BFADB665-8B0C-44FB-9841-CD0E8D5B239B [Play](#) [Email](#)

Orange arrows point from the following text boxes to the corresponding fields in the form:

- From 'Name' box to the Name field.
- From 'Description' box to the Description text area.
- From 'Speaker' box to the Speaker text field.
- From 'Location' box to the Location text field.
- From 'Category' box to the Category dropdown.
- From 'Date' box to the Date field.
- From 'Duration' box to the Duration field.
- From 'URL' box to the URL field.

Name. The name of the conference that participants will see.

Description. Details about the conference to be displayed beneath the Conference Name in the Conference List.

Speaker. Name or names of the presenters in the conference.

Location. Where the conference takes place.

Category. Select the appropriate Category from the pull down list for this conference.

Date. The date and time of the conference will be displayed at creation time of the conference.

Duration. The length of the conference. This is also updated when the conference has been edited.

About Conference Thumbnails

Up to 5 thumbnails will be generated for a recorded conference. They are created at 5 seconds, 1 minute, 5 minutes, 30 minutes and 1 hour and the default is set to 30 minutes.

If the output is two videos, the thumbnails will be of the main input. For **Joined**, the thumbnail will be a combination of main and dual. If dual has not been turned on, the dual will be a poster. For the switching output, the thumbnail will be main but if dual is on, then it will be the dual image. Picture in picture will be the dual image with the main insert.

To change the thumbnail, select another one by clicking on it and then **Saving the conference**. The new thumbnail will display for users in the interface.



Editors changing the thumbnail may need to empty their cache and also refresh their browser to see the change.

The Conference Thumbnails



About the Content Editor

Use the **Content Editor** to edit your conference in the following ways:

- Change the **In** and/or **Out** point/s of the conference
- Add indexes to the conference
- Add another conference to the edited one.

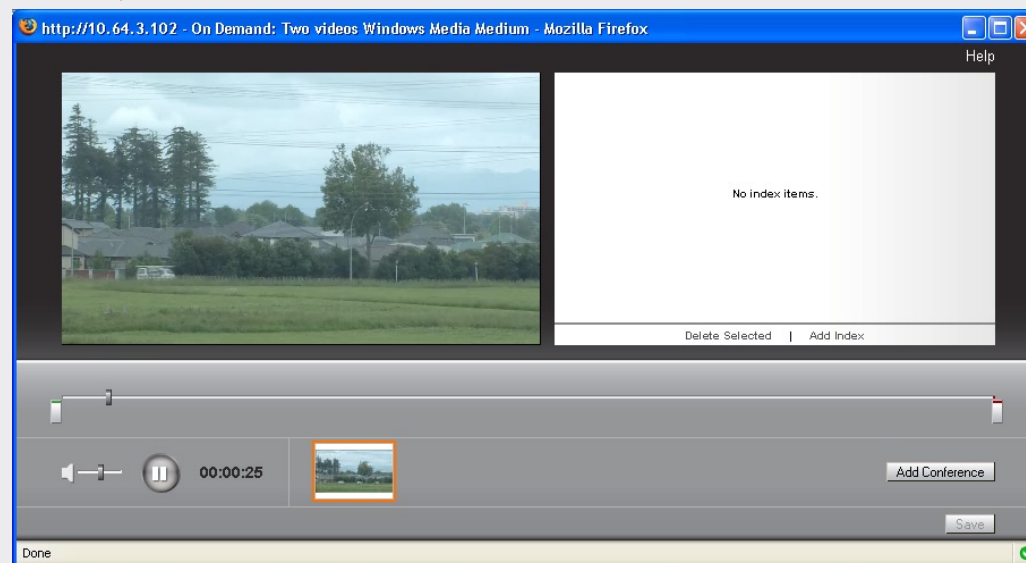
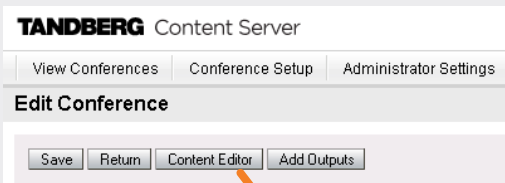
Access to the **Content Editor** is available from the **Edit Conference** page to Administrators and Users who have permission to edit a conference.

After clicking the **Content Editor** button, the **Content Editor** will open in a new window.

The top section displays the Conference movie to the left and the Indexes options to the right.

The bottom section has the conference controls, the in and out points and the option to import another Conference.

What the Content Editor Looks Like



Adding Indexes

About Indexes


An Index is a point in a Conference that a User can click on to advance the Conference to.

Only Editors to Conferences can add Indexes.

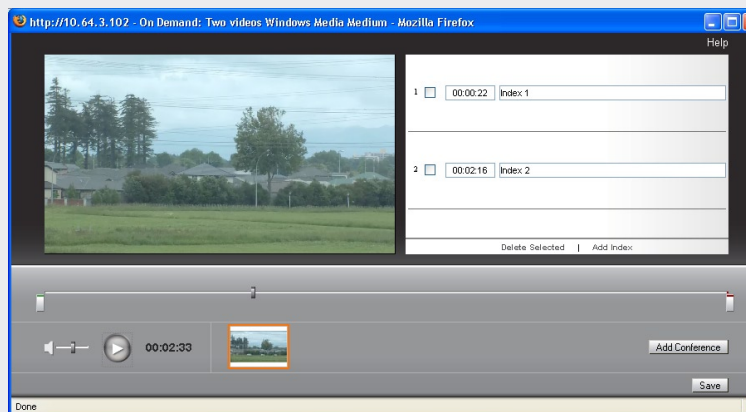
Every Conference should use Indexes as a time saving device for users to find the content they want quickly and easily.

Indexes can be selected by clicking the select box to the left of the Index.

When an Index is selected, a small vertical line will be displayed above the Time Line to indicate the position of the Index.

 Times entered as seconds will be converted.
Example: 65 will be converted to 00:01:05

How It Looks with Indexes

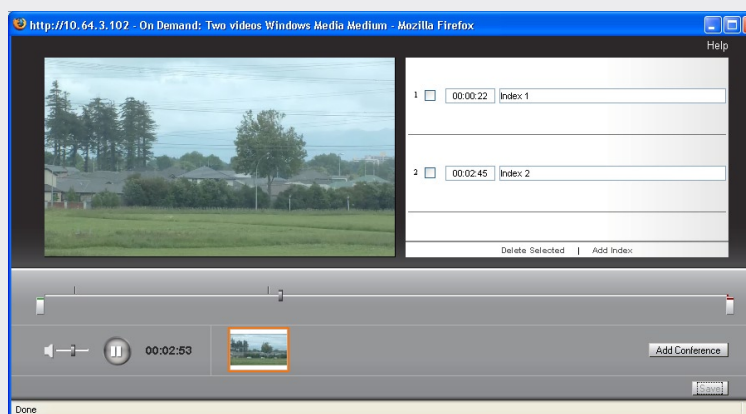


Adding Indexes

Adding Indexes into the timeline is done by clicking the **Add Index** text link when the scrubber bar is correct place while the clip is playing.

The index will be added into the list and given an initial name of Index 1, Index 2 etc.

Selecting an Index and Changing the Time



Moving Existing Markers

The only way to change the position of an Index is to change its time.

Change the time (format is hh:mm:ss) in the time field and press enter.

Removing Indexes

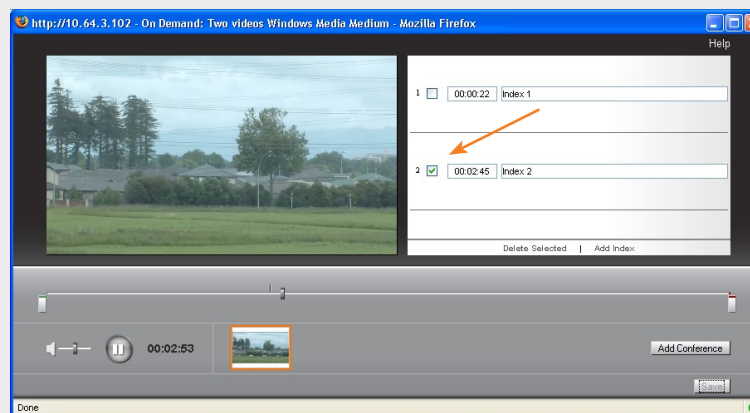
About Removing Indexes

Select the indexes to be removed by clicking the select box to the left of the marker time.

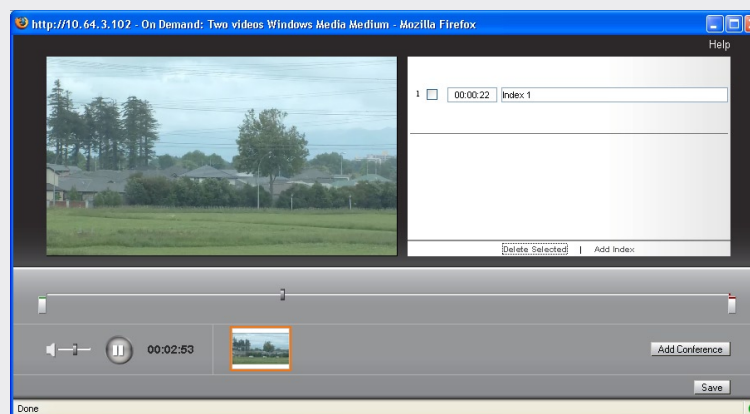
When the indexes that you want to remove have been selected, click the **Delete Selected** button.

Note: Click the **Save** button after changes have been made.

Selecting an Index



The Result of the Index Being Deleted



Adding Conferences

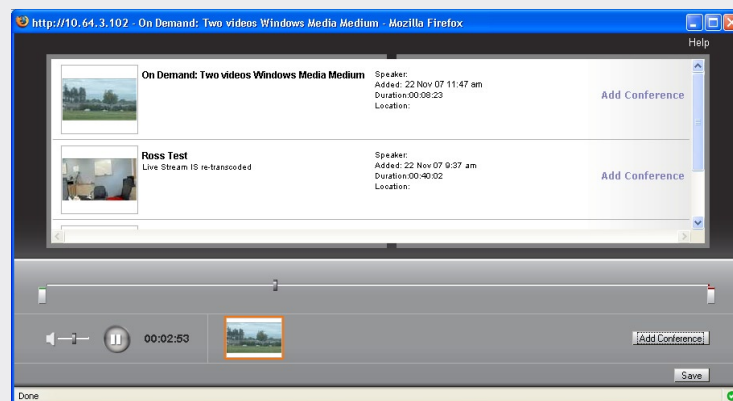
TANDBERG CONTENT SERVER
ADMINISTRATOR GUIDE

About Adding Conferences

Use the **Add Conference** option to add and then edit two different conferences on your TANDBERG Content Server into one.

Importing can only be done if the outputs of each conference are the same and the editor has permission to import the conference.

How It Looks When the Add Conference Button Is Clicked



Add Conference Options

Click the **Add Conference** button and a list of available conferences will be displayed.

Click the **Add Conference** link for the Conference you want to add to the currently edited one.

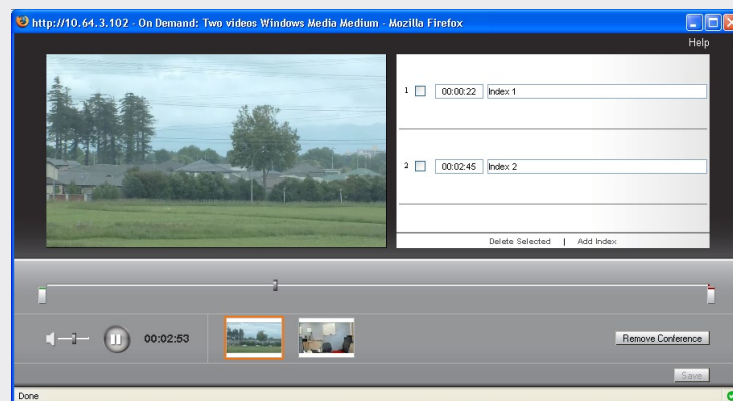
Removing Breaks in Conferences

You may have recorded a conference that has a break in the middle that you want to remove. This is how it is done.

Edit the conference and then add the same conference again using the **Add Conference** button. Adjust the **In** and **Out** points of each conference to remove the section in the Conference that you do not want.

Add indexes to each conference and save your changes. Check the result in the Viewer and make any final adjustments.

The Content Editor with the Edited and Added Conference Thumbnails Next to Each Other



Options When Added

When adding another conference, its thumbnail will be displayed to the right of the edited conference's thumbnail. The currently selected conference will have an orange rectangle around it.

Note: If the wrong conference has been added, click the **Remove Conference** button, then add the correct one. Original conferences will not be damaged by adding or removing them from another conference.

To edit the Added Conference, click its thumbnail and continue. The selected conference can have indexes added as well as In and Out Points changed.

About Adding Outputs

Administrators, owners and editors can **Add Outputs** to a conference once it has completed.

Why would you do this?

The original recording may not contain the correct outputs needed by your users or a request is made for a format that was not created and so you add it to the conference.

Read the [Template Editor](#) section of this Manual as to how to use this screen.

Some things to note when Adding Outputs:

- The original Layout cannot be changed
- Only 2 sizes can be chosen for Viewer and Download
- Only on-demand outputs will be created
- The total number of outputs can exceed the 6 when the Conference is created
- Adding Outputs will put an added load on the TANDBERG Content Server
- The Conference Outputs will be added into the Offline Transcoding Queue for processing and will start when all the preceding Conferences have been processed.

The Add Outputs Screen

Edit Conference

[Save](#) [Return](#) [Content Editor](#) [Add Outputs](#)

Add Outputs

[Save](#) [Return](#)

Template

Output Viewing Options

- Create movies for the Content Viewer ☒
- Create movies for Portable Devices ☐
- Create movies for Download ☐

Content Viewer

Output Layout



Movie Settings

Formats (choose up to 3)

Windows Media
MPEG4
Real Media

Conference sizes (choose up to 2)

Audio only
Small
Medium
Large

On Demand Media Server Settings Please select the Media Servers that will serve the following formats on demand

Windows Media

Local Windows Media Streaming Server

MPEG4

Local IIS Web Server

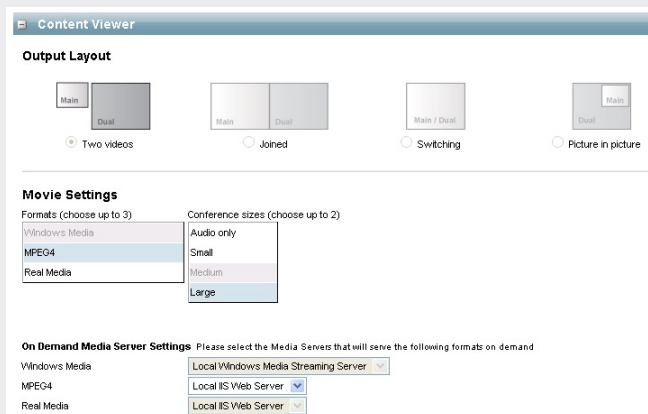
Real Media

Local IIS Web Server

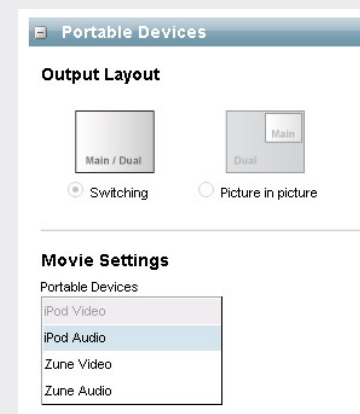
Example Screenshots

Adding Format MPEG4 and a new size Large

This will result in a new Windows Media Large size as well as and MPEG4 Medium and Large all with the Two Videos Layout.

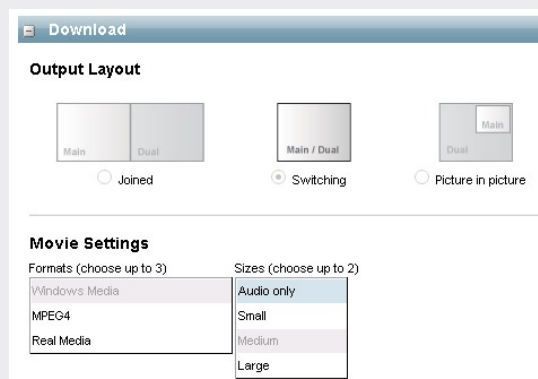


Portable Devices



Download

A new Windows Media Audio only download is to be added to the Windows Media Medium download that has already been created.



A new iPod Audio output has been added to the iPod Video that has been created already.

TANDBERG Content Server



Appendices

We recommend that you check out the TANDBERG web site regularly for updated versions of this manual:

<http://www.tandberg.com/support/documentation.php>

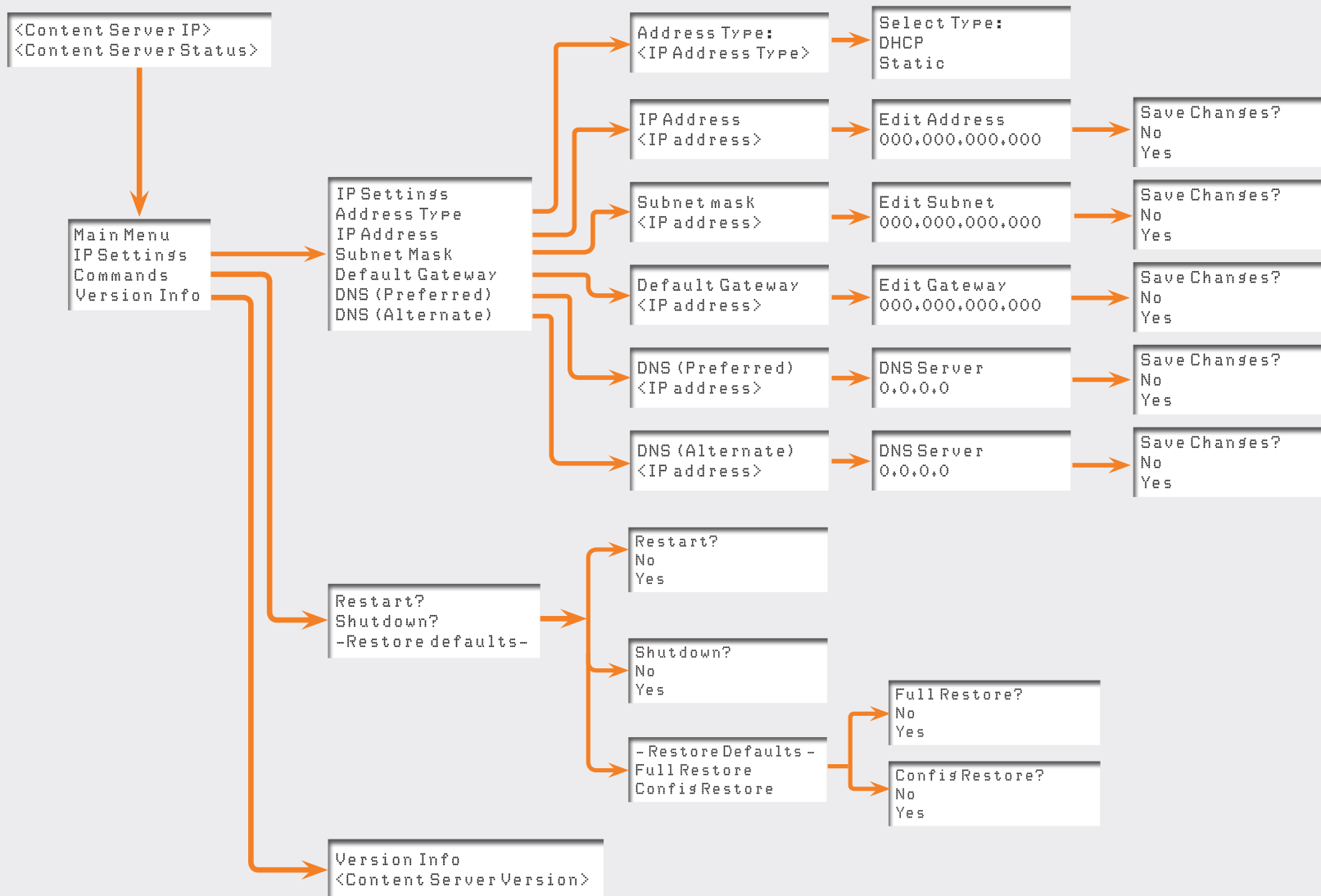
The Appendices contain information you may need to better understand the TANDBERG Content Server.

Here you will find an LCD panel overview, a compatibility guide (which browser and media players version to use), Content Server port assignment, and recording templates overview.

Appendix 1: LED Panel Menu Structure

Content Server Status
is displayed as:

- **Idle** (when the server is not in a call and not transcoding).
- **In Call** (when the server is in a call).
- **Transcoding** (when the server is not in call and transcoding is in progress).



Appendix 2: Compatibility

About Compatibility

For correct playback of streaming video on client machines, please read the compatibility notes on this page.



Please ensure that you have JavaScript, ActiveX and media plugins enabled in your browser.

Platform and Browser Version Compatibility

| OS | Browser | MPEG4 | Windows Media | Real Media |
|-----|-----------------------------------|-------|---------------|------------|
| MAC | FireFox 2 and higher | Yes | No | No |
| | Safari 2 and higher | Yes | No | No |
| WIN | Mozilla FireFox 2 and higher | Yes | Yes | Yes |
| | Internet Explorer 6.0, and higher | Yes | Yes | Yes |

Check the platform, browser and browser version, then select the appropriate streaming format for content creation and playback according to the compatibility matrix.

Recommended Player Versions

| Content Type | Recommended Player |
|-----------------------|------------------------------------|
| Windows Media content | Windows Media Player 9.x or higher |
| Real Media content | RealPlayer™ 10.x |
| MPEG4 content | QuickTime 7.x |

Playback of Windows Media Content in Mozilla Firefox

Platform: Windows.

Browser version: Mozilla Firefox (all versions).

Streaming content format: Windows Media content.

Mozilla Firefox browsers require a special Microsoft Windows Media Player Plugin control plugin to be installed to display movies in Windows Media® WMV format.

The following Microsoft Windows Media Player Plugin for Mozilla Firefox has been tested and is available as a free download at the time of publishing this user guide from: <http://port25.technet.com/pages/windows-media-player-firefox-plugin-download.aspx>

Appendix 3: Recording Templates at a Glance

Transcoding Templates and Their Outputs at a Glance

| | |
|--|--|
| Windows Media PoP Live and On Demand: | Uses the Two Videos output consisting of a Main and a Dual. Conference size is Medium for both Live and On Demand. |
| Windows Media PoP Live and On Demand with Portable Device Download | Uses the Two Videos output consisting of a Main and a Dual. Conference size is Medium for both Live and On Demand. Also has downloadable Video outputs for Zune and iPod using the Switching Output. |
| Windows Media PoP On Demand Only | Uses the Two Videos output consisting of a Main and a Dual. Conference size is Medium for On Demand. No live output from this Template. |
| Windows Media Single Live and On Demand | Uses the Switching output. Displays Main but when Dual is switched on, Dual is displayed. Conference size is Medium for both Live and On Demand. |
| Windows Media Single On Demand Only | Uses the Switching output. Displays Main but when Dual is switched on, Dual is displayed. Conference size is Medium for On Demand viewing only. |

Appendix 4: TANDBERG Content Server Port Assignment

The table lists ports used by the TANDBERG Content Server.

| Port | Protocols | Used by |
|------|-----------|--|
| 80 | TCP | The TANDBERG Content Server web application |
| 443 | TCP | The TANDBERG Content Server web application on SSL |
| 554 | TCP, UDP | WMS RTSP Server Control Protocol |
| 1718 | UDP | Gatekeeper discovery |
| 1719 | UDP | RAS |
| 1720 | | Listen Port |
| 1755 | TCP, UDP | WMS MMS Server Control Protocol |
| 2090 | TCP | The TANDBERG Content Server database |
| 3389 | TCP | Remote Desktop Protocol |
| 8008 | TCP | The TANDBERG Content Server application |
| 8080 | TCP | WMS HTTP Server Control Protocol |
| 8096 | TCP | Windows Media Administration Site on SSL |
| 8098 | TCP | Windows Web Administration on SSL |

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